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AIR FORCE SPACE COMMAND

AIR FORCE SPACE COMMAND
INSTRUCTION 10-605

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Operations

OPERATIONAL ACCEPTANCE PROCESS

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This instruction implements Air Force Instruction (AFI) 10-601, *Operational Capability Requirements Development*, AFI 63-101/20-101, *Integrated Life Cycle Management*, AFPAM 63-128, *Integrated Life Cycle Management*, AFI 63-131, *Modification Management* and AFI 99-103, *Capabilities-Based Test and Evaluation*. This instruction outlines the Air Force Space Command (AFSPC) Operational Acceptance Process necessary for the operational acceptance of new systems, new capabilities, and permanent modifications providing space and cyberspace capabilities for which AFSPC is the lead command, to include those fielded to other MAJCOMS and Services. This instruction applies to: Headquarters Air Force Space Command (HQ AFSPC); Space and Missile Systems Center (SMC); Air Force Life Cycle Management Center (AFLCMC) for those systems owned and operated by AFSPC and acquired or maintained by AFLCMC for AFSPC under the Program Executive Officer (PEO) Space Systems, PEO Battle Management, or PEO C3I & Networks; Air Force Network Integration Center (AFNIC);

14th Air Force (14 AF); 24th Air Force (24 AF); the 21st Space Wing (21 SW), 30th Space Wing (30 SW), 45th Space Wing (45 SW), 50th Space Wing (50 SW), 67th Cyberspace Wing (67 CW), 688th Cyberspace Wing (688 CW), and 460th Space Wing (460 SW), Air Force Reserve and Air National Guard. This instruction does not apply to Foreign Military Sales (FMS) components of AFSPC systems. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) AFMAN 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Refer recommended changes and

questions about this publication to the Office of Primary Responsibility (OPR) using Air Force Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. Submit requests for waivers through the chain of command to this publication OPR for non-tiered compliance items.

This document supersedes AFSPCI 10-205, *Operational Transition Process*, 10 December 2013. Major changes include a change in focus from Operational Transition Process to Operational Acceptance Process to better focus this instruction on the final steps leading to accepting new systems, new capabilities, or permanent modifications for operational employment as opposed to the entire acquisition transition process. Changes within this rewrite include: clarification that Operational Acceptance Plans are for new systems and new capabilities, Operational Acceptance Plans for modifications are at the discretion of the responsible HQ AFSPC/A2/3/6 Division; clarification of the relationship between an Operational Acceptance decision and an Initial Operational Capability or Full Operational Capability declaration; provides consideration for early use; introduces the Mission Assignment Process (MAP) to identify and transition experimental activities for residual operations for service use; adds acceptance of Non-Traditional Data Sources; updates AFSPC naming conventions IAW most recent AFSPC reorganization; updates and adds roles and responsibilities; codifies Trial Period Review Panels; establishes Responsive Operational Acceptance for cyberspace systems for an early assessment of a given technology delivery for rapid employment; provides sample memorandums.

Chapter 1

INTRODUCTION

1.1. Purpose. This instruction defines the AFSPC Operational Acceptance Process necessary to gain Operational Acceptance (OA) from the Commander, Air Force Space Command (AFSPC/CC) or his/her delegated authority, ensuring new systems, new capabilities and permanent modifications meet operational requirements and have the necessary elements required to support mission execution. The Operational Acceptance Process integrates with milestone decisions made in the life cycle management process shown in **Figure 2.1**, and aligns with the Air Force Materiel Fielding Process outlined in AFI 63-101/20-101, *Integrated Life Cycle Management* and AFI 63-131, *Modification Management*. To achieve operational acceptance of new systems, new capabilities and permanent modifications: (1) necessary resources and support must be in place, such as verified technical orders, sustainment funding, training, simulators, manpower, required mission spares, etc.; (2) documented OA criteria are met and organizational responsibilities complete; and (3) risks must be identified to allow authorities to make informed decisions. This document is not intended to duplicate information contained in other instructions (Department of Defense [DoD], United States Strategic Command [USSTRATCOM], Air Force [AF], Headquarters Air Force Space Command [HQ AFSPC]) except in those situations where amplification is required.

1.2. Lead MAJCOM for Space and Cyberspace. As the lead Major Command (MAJCOM) for space and cyberspace, HQ AFSPC organizes, trains, and equips space and cyberspace forces to present to combatant commands. Additionally, HQ AFSPC provides strategic planning direction, operating concepts, and requirements to the designated Program Management Offices (PMO) and the Science and Technology (S&T) communities to obtain new capabilities. This instruction establishes the roles and responsibilities for HQ AFSPC, operating units, and other stakeholder organizations (e.g., affected PMO, operational test organizations) in terms of the Operational Acceptance Process.

1.3. Cross-Command and Multi-Service Cooperation. Multi-service or multi-domain programs may involve stakeholders from other commands, services, or allied partners. The processes outlined in this instruction rely on mutual support between stakeholders and clear understanding of what each contributes to the OA process. These stakeholders will be afforded the opportunity to participate in the OA process to include input to the OA decision.

Chapter 2

OPERATIONAL ACCEPTANCE PROCESS

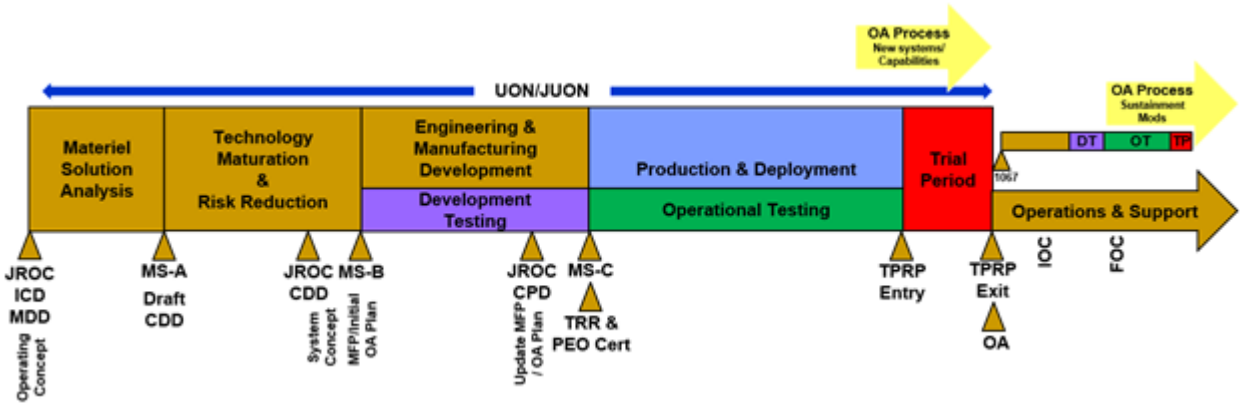
2.1. Operational Acceptance Process. The Operational Acceptance Process is the formal process by which AFSPC accepts delivery of a new system or permanent modification to an existing system. Acceptance generally results in AFSPC taking operational responsibility for the system or modification and support of its sustainment. The Program Manager retains responsibility for the life cycle management of the system throughout the system life cycle, regardless of program realignment/transfer/transition. Acceptance may result in an AFSPC declaration of Initial Operational Capability (IOC), Full Operational Capability (FOC), or an OA decision. IOC and FOC are generally understood as attainment (initial or full) of a defined capability supported across the Integrated Product Support Elements enabling employment of a weapon system as captured in approved requirements documents. OA addresses several situations. For new capabilities, it is used to accept individual subsystems of a larger system that will eventually achieve IOC/FOC as a whole; for example, individual satellites may be OA'd prior to IOC/FOC of a constellation. It can also be used to accept new functionality or permanent modification to an existing weapon system post IOC/FOC, or it can be used to accept a Quick Reaction Capability (QRC) to be fielded and employed in response to a warfighter's urgent need. It is completely feasible that a system/capability would progress over time from OA to IOC to FOC as the envisioned end-state comes to fruition. Throughout this instruction, acceptance will be referred to as OA, with the understanding that acceptance may also pertain to IOC/FOC declarations as applicable. The Operational Acceptance Process is not used for maintenance actions as defined by AFI 63-131.

2.1.1. The process of deploying space, cyberspace, and other capabilities (i.e., Information Operations, Military Deception, Military Information Support Operations, and Operations Security) requires flexibility to allow for customized solutions that can be developed, tested, and deployed rapidly. The Operational Acceptance Process permits flexibility to integrate and normalize these capabilities into operations within operationally-relevant timelines. As the OA Approval Authority for AFSPC, the AFSPC/CC has authority to declare systems, capabilities, and permanent modifications ready for operational use. This authority may be delegated as described in **Table 2.1**. Through an OA decision, the OA Approval Authority declares the new system, new capability or modification of a fielded system is able to support its operational mission and is ready to present to the combatant command, if applicable. OA normally occurs once testing is complete, mission-impacting deficiencies are fixed or mitigated, and integrated product support elements are in place. **Chapter 3** provides a high level description of the steps in the Operational Acceptance Process.

2.2. Operational Acceptance Process Relationship to the Program Life Cycle. The Operational Acceptance Process aligns with the Acquisition Program Life Cycle as depicted in **Figure 2.1**. While it begins with development of the OA Plan, the majority of effort focuses on activities from operational testing through trial period to OA and can be tailored depending on the needs or unique requirements of a program or modification. HQ AFSPC and other stakeholders use the Operational Acceptance Process to migrate systems, capabilities, and permanent modifications from the final stages of development through the OA decision. At a minimum, the PMO, test agencies, operational units and HQ AFSPC directorates must be

involved in this effort. AFSPC staff will employ management teams, constructs and/or mechanisms to manage transitional efforts.

Figure 2.1. Operational Acceptance Process.



2.3. Force Development Concepts. Force development concepts (hereafter referred to as "concepts") help guide how the Air Force organizes, trains and equips its forces. Information contained in concepts influences the development of the Materiel Fielding Plan and Operational Acceptance Plan. Refer to AFI 10-2801, *Force Development Concepts* for information on concepts.

2.4. Materiel Fielding Plan. The Program Manager (PM) is responsible for developing and maintaining a Materiel Fielding Plan (MFP) IAW AFI 63-101/20-101. The PM shall coordinate the MFP with HQ AFSPC; the Directorate assigned as the OPR will ensure it is coordinated with all other MAJCOM Directorates and the applicable Numbered Air Force (NAF). For sustainment modifications to existing systems not managed as an Acquisition Category (ACAT) program, the PM will develop and coordinate with AFSPC on an agreed to fielding plan to define operational deployment requirements prior to completion of design activities. Refer to AFPAM 63-128 for more information on materiel fielding strategies and plans.

2.5. Operational Acceptance Plan. OA Plans are for new systems and new capabilities, and will be developed if no MFP exists. An OA Plan may also supplement the MFP to detail specific actions, timelines, criteria, and organizational responsibilities necessary to accept the capability from the acquirer and employ it as an operational capability. The OA Plan will complement, but not duplicate, the MFP by providing supplemental data to support successful operational acceptance. The responsible HQ AFSPC/A2/3/6 Division that is, or will be, responsible for the system or capability will determine if an OA Plan is necessary to supplement the MFP. The OA Plan is focused post-PEO Certification, from operational testing through trial period to OA. Because OA criteria, decision parameters, risk tolerances and delivery timelines are unique for each program, the OA Plan must be a scalable, tailorable document to address each capability. The initial OA Plan is developed prior to Milestone-B, and updated as necessary to correspond with updates to the MFP or fielding strategy. **Attachment 3** provides an example OA Plan template.

2.5.1. Responsibility for developing the OA Plan resides with the HQ AFSPC/A2/3/6 Division that has, or will have, overall operational responsibility for the capability. The designated HQ AFSPC/A2/3/6 Division will update the OA Plan when a significant change

to the development, fielding, or sustainment of the program or system impacts the ability to execute the plan. The OA Plan is coordinated and approved at the level commensurate with the OA Approval Authority described in **Table 2.1**. Coordination will include the PEO or PMO, appropriate HQ AFSPC Directorates, and the responsible NAF. The OA Plan will address key decision points with corresponding criteria for success (i.e., trial period entry, trial period exit, Operational Acceptance). In some cases, the OA decision points will coincide with IOC or FOC declaration.

2.5.2. OA Plans for modifications are at the discretion of the responsible HQ AFSPC/A2/3/6 Division. A decision to generate an OA Plan for a modification will be made by the responsible HQ AFSPC/A2/3/6 Division within five days from lead command certification and approval of the modification proposal.

2.6. Operational Acceptance Decision. The OA decision is the point where the OA Approval Authority accepts, accepts with liens, or rejects a capability or modification for operational use. Following OA or IOC, operational responsibility for the new capability transfers, via appropriate transfer documentation identified within the OA Plan, to the operational organization that will operate and maintain the system. OA decisions may be executed multiple times within a program's life cycle depending on the unique delivery schedule of capabilities or modifications to a fielded system. For example, the launch of an additional satellite into an existing constellation (e.g., GPS satellite) may drive an OA decision for use of that particular asset, while an IOC or FOC determination may be driven by the number of available on-orbit assets. For capability and sustainment permanent modifications impacting form, fit, function or interface (F3I) as described in AFI 63-131, an OA decision is required. Maintenance actions not impacting F3I will not require an OA decision and can be implemented with NAF, operational unit level approval as defined by lower level guidance.

2.6.1. The OA Approval Authority determines if new systems, capabilities or permanent modifications to fielded systems have achieved operational capability, acceptable levels of reliability and dependability, and account for the supporting resources identified in the fielding documentation necessary to support the acceptance for operations. The OA decision is allocated to the appropriate level based on standardized delegation determination factors listed in **Table 2.1**. An OA decision includes considering the level of operational risk when determining if, when and to whom OA authority will be delegated. It is important that leadership/decision makers ensure that the levels of decision authority are aligned appropriately for mission requirements; the higher the risk, the higher the decision-level. **Table 2.1** provides general guidelines for determining the OA Approval Authority; however, an OA decision can be retained at a higher level or delegated to a lower level based on leadership determination.

Table 2.1. OA Approval Authority Determination.

OA Approval Authority	Programs/Activity
AFSPC/CC	• Initial or One-of-a Kind ACAT I, ACAT IA & ACAT II Program Deliveries
HQ AFSPC/A2/3/6 Director	• Follow-on ACAT I, ACAT IA & ACAT II Program Deliveries • ACAT III Program Deliveries • Capability Modifications (total expected expenditure of RDT&E and procurement appropriations is > $50M)
HQ AFSPC/A2/3/6 Division Chief	• Capability Modifications (total expected expenditure of RDT&E and procurement appropriations is < $50M) • Sustainment Modifications • Research & Development/Experimental efforts
NAF/Wing/Group/Squadron	• Directed modifications (e.g., Cyberspace Responsive Operational Acceptance (ROA); USCYBERCOM orders)

2.7. Initial Operational Capability (IOC) and Full Operational Capability (FOC). The purpose of an IOC or FOC declaration is to alert combatant commanders that some or all units and/or organizations scheduled to field a new capability have successfully received and can employ and maintain that mission. IOC and FOC criteria are defined in a program's Capability Development Document (CDD), Capability Production Document (CPD) or other applicable requirements documents as part of the normal acquisition process. In some instances, IOC may occur simultaneously with FOC, especially with one-of-a-kind systems; however, FOC typically occurs after IOC in the life cycle of a program. This is especially true if the program involves bringing a number of like assets on-line (e.g., satellite constellations). The AFSPC/CC is the IOC/FOC declaration authority, but may delegate authority to the HQ AFSPC/A2/3/6 Director. Systems that will be declared IOC/FOC will follow the process outlined in this instruction.

2.8. Early Use. Early use of an asset prior to OA may be considered if there is an approved requirement and it's deemed advantageous and necessary to increase military utility with the understanding that the asset is still in the developmental phase. Early use will be coordinated between the requesting agency and affected AFSPC and acquiring organizations to determine limitations, risks, capabilities, interim procedures, resource requirements and readiness. HQ AFSPC/A2/3/6 in conjunction with the combatant command and operations community will determine the need and/or feasibility of early use for a system. Early use operations will be conducted in parallel with development and testing activities. Operational and development

priorities will be deconflicted on a case-by-case basis between the PMO and HQ AFSPC/A2/3/6. Early use does not negate the requirement to follow the Operational Acceptance Process, which still applies to gain an OA decision. For early use of satellite assets, see AFSPCI 10-1204, *Satellite Operations*. For information on QRC programs, refer to AFI 63-101/20-101, *Integrated Life Cycle Management*.

2.9. Rapid Acquisition. Certain capability development efforts (e.g., Joint Urgent Operational Needs [JUON], Joint Emergent Operational Needs, Joint Capability Technical Demonstrations [JCTD], DoD Component Urgent Operational Needs [UON], and Operationally Responsive Space (ORS) operational demonstrations) follow rapid acquisition processes depending on the need of the requesting user. These processes follow tailored acquisition activities requiring the need to execute the Operational Acceptance Process in a compressed/modified timeline to ensure capabilities can be successfully fielded with required support and acceptable risk. If the capability is to be added to an existing operational system, an Operational Acceptance decision is required at the appropriate level in accordance with **Table 2.1**. Rapid acquisition processes are defined in the Joint Capabilities Integration and Development System (JCIDS) Manual; DoDI 5000.02; National Defense Authorization Act, Sec. 2273a ORS Program Office; and AFI 10-601. In these special cases, acquisition and operational organizations will strive to meet requirements within the AFSPC Operational Acceptance Processes. The HQ AFSPC/A2/3/6 Director is the approval authority for waivers to address rapid acquisition efforts only for the processes covered within this instruction. For waivers beyond the scope of this instruction, see DoDI 5000.02.

2.10. Real-Time Operations and Innovation (RTOI). RTOI enables development and fielding of capabilities addressing critical cyberspace needs at the fastest possible pace. This rapid deployment of capabilities requires a dynamic, agile, risk-based approach that balances needs against operational risks and threats and considers opportunities for emerging technologies. The approval authority to accept RTOI capabilities for presentation to combatant commands or other DoD and government organizations is the Commander, 24th Air Force (24 AF/CC); however, any cyberspace capability requiring S&T shall be managed by HQ AFSPC/A5/8/9. If the RTOI process is used, acquisition responsibilities are documented by 24 AF with the PMO IAW DoDI 5000.02. For information on the roles, responsibilities, authorities, relationships, and high-level processes for executing RTOI activities, refer to AFSPCI 10-170.

2.11. Cyberspace Responsive Operational Acceptance. Traditional operational acceptance may not be responsive enough for cyberspace systems. Many systems and their upgrades do not warrant high level oversight due to their limited scope or resources. The ROA process will ensure an early, objective assessment of the urgency and complexity of a technology delivery. ROA oversight of the scope of OA effort supports delegation of acceptance authority to a level commensurate with risk to minimize delays in delivery. Attachment E provides the details of ROA for cyberspace systems.

2.12. Experimental Systems. Experimental systems being considered for residual operations will utilize the Mission Assignment Process (MAP). This process provides a reoccurring mechanism for HQ AFSPC to identify and transition experimental activities to a residual status. HQ AFSPC/A2/3/6 and HQ AFSPC/A5/8/9 co-oversee the MAP to ensure that experimental systems satisfy capabilities based requirements derived from user defined needs. The MAP is designed to maximize the residual capabilities of experimental activities by identifying and

planning for operations early in the system development lifecycle. Attachment F defines the process and is broken down into five phases: Initiate, Plan, Execute, Control and Close.

2.13. Integrated Tactical Warning and Attack Assessment (ITW/AA) System. In addition to adhering to the Operational Acceptance Process set forth in this instruction, AFSPC systems that are part of or contribute to the ITW/AA system will comply with requirements associated with designated ITW/AA systems and follow procedures IAW North American Aerospace Defense Command (NORAD) Instruction (NI) 10-3, *Mission Integrity, Change Control Management and Test Control for the Integrated Tactical Warning and Attack Assessment (ITW/AA) System*, and United States Strategic Command (USSTRATCOM) Instruction (SI) 534-22, *Mission Integrity, Change Control Management, and Test Control for the Integrated Tactical Warning and Attack Assessment (ITW/AA) System*, for system integrity, configuration management, change control, modifications, and test control.

2.14. Non-Traditional Data Source (NTDS). NTDS are data sources or sensors that do not meet all of the qualification requirements for OA under the guidelines of this instruction. Non-traditional providers primarily include commercial, academic and government sources, both foreign and domestic; but may also consider inputs from other alternative sources. NTDS usually differ in at least one of several distinct factors; these include but are not limited to communication pathways, data types, data structure, measurement accuracy, timeliness, availability, compliance with USSTRATCOM/Air Force instructions, acquisition differences, country or agency with ownership and maintenance, configuration control, compliance with nominal operational acceptance processes, and compatibility with the applicable Command and Control (C2) system.

2.14.1. For the purpose of NTDS, acceptance refers to accepting the data for operational use, which will be the responsibility of the appropriate AFSPC Division. After all initial testing, training, and numerical validation is complete, the applicable unit will request trial period entry from the applicable AFSPC System OA Authority. Some mission areas may have specific guidelines for Non-Traditional Data Sources (e.g. there is an AFSPCI currently in review that addresses space situational awareness metric data integration guidelines for Non-Traditional Sensors).

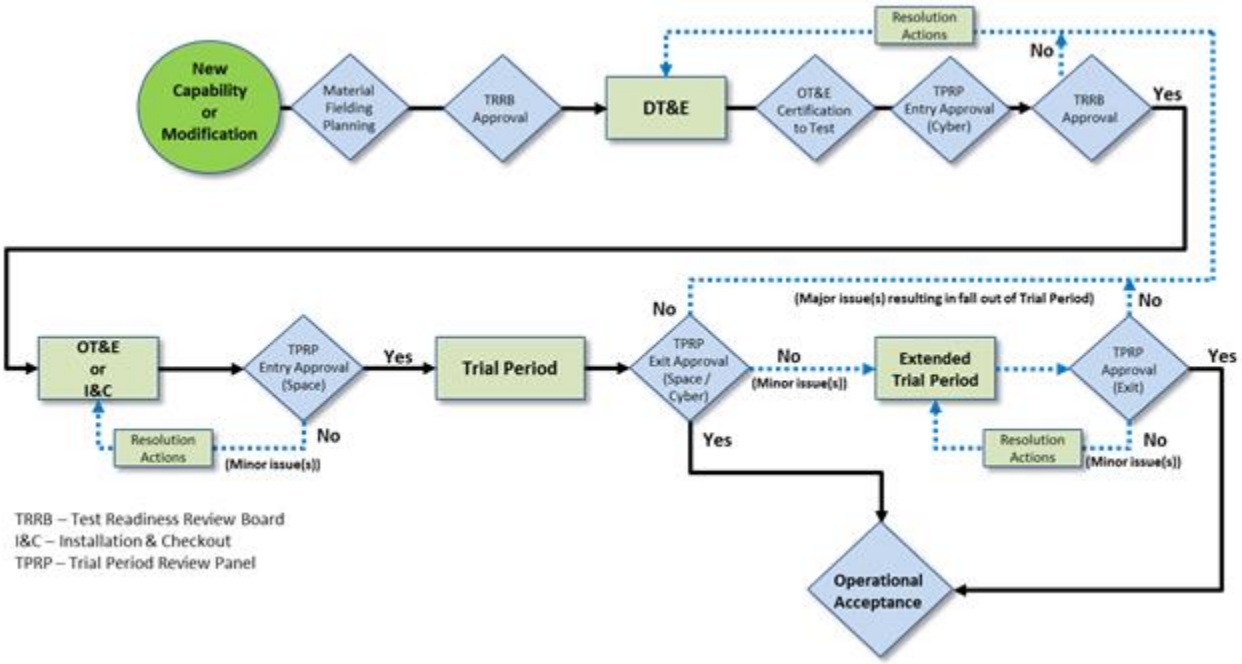
2.14.2. Multiple data sources/sensors may be placed into overlapping trial periods concurrently if all entry criteria are met. The respective data sources will be tested and evaluated in combatant command priority order, but will be placed into trial period based on the order in which a given data feed meets all entry prerequisites. All stakeholders, to include non-DoD and foreign nationals, will be invited to participate in the trial period review panel (TPRP) for entry and exit via telecom, Defense Collaborative Services, or VTC. If a sensor's data is not accepted for operational use, the combatant command, applicable unit, and the sensor manager will receive justification for the decision in writing within five (5) business days after non-acceptance. Any data source/sensor for which the data is not accepted for operational use may be re-submitted for trial period entry once concerns are addressed.

Chapter 3

OPERATIONAL ACCEPTANCE PRODUCTS AND EVENTS

3.1. Operational Acceptance Process Flow. The Operational Acceptance Process Flowchart (**Figure 3.1**) depicts a typical Operational Acceptance Process from developmental testing through trial period to OA in order to accept a capability from acquisition into operations. Some systems, based on their unique OA Plan, may eliminate or combine steps (e.g., TP and OT&E) prior to the OA decision point. In select cases, these processes can be condensed or accomplished in parallel to reduce the time required to complete the Operational Acceptance Process. The intent of the process is to assess the readiness of the system for use in operations.

Figure 3.1. Operational Acceptance Process Flowchart.



3.2. Operational Acceptance Process Products/Events. The Operational Acceptance Process generates products and events providing leadership the necessary information to make informed decisions for moving a capability or modification to the next stage of the process. The Operational Acceptance Process ensures systems, capabilities, and permanent modifications meet operational requirements and have the necessary elements required to support mission execution. Inherent in the process are a number of decision points providing the OA Approval Authority and stakeholders the opportunity to review and evaluate system or capability performance prior to an OA decision. These decision points must be completed to gain approval to move the new capability or modification forward to the next step or return to a previous step for further development, test, or evaluation as determined by the OA Approval Authority. Operational Acceptance Process steps are listed in **Attachment 2**.

3.2.1. The Operational Acceptance Plan (OA Plan) is a tailored plan which documents the specific actions, timelines, criteria, and organizational responsibilities for operational employment of a new capability. The OA Plan is focused post-PEO Certification, from

operational testing through trial period to OA. The OA Plan is developed and approved prior to Milestone-B and updated periodically to remain synchronized with test planning and the MFP or fielding strategy. The HQ AFSPC/A2/3/6 Division that is, or will be responsible for the capability is responsible for developing the OA Plan along with appropriate stakeholders. The OA Plan should address specific criteria, such as trial period entry, exit, and OA criteria, as well as the decision points necessary to accept the capability for operational use. The OA Plan will avoid repeating information documented in the MFP, other fielding plans, or agreements unless it is of benefit, such as offering further clarification or details necessary to support the decision of the OA Approval Authority. An example template that may be used to develop the OA Plan is provided in **Attachment 3**. Example OA criteria for consideration are included in **Attachment 4**.

3.2.2. Test Readiness Review Board (TRRB). A TRRB is required for all Developmental Test and Evaluation (DT&E), Operational Test and Evaluation (OT&E) or integrated DT&E/OT&E testing. TRRBs for OT&E will be held no later than five days prior to test execution and following OT&E certification IAW AFI 99-103, *Capabilities-Based Test and Evaluation of Space and Cyberspace Systems* and AFMAN 63-119, *Certification of System Readiness for Dedicated Operational Test*. The HQ AFSPC/A2/3/6 Director chairs the OT&E TRRB for high risk operational tests (e.g., Force Development Evaluation [FDE], Operational Utility Evaluation [OUE]), unless he/she has delegated decision authority. All cyberspace Real-time Operations and Innovation risk management processes and TRRBs are delegated to the 24 AF/CC. For more information on TRRBs, refer to AFSPCI 99-103.

3.2.3. Trial Period (TP). Trial period is the final evaluation step prior to OA and provides an operating organization the opportunity to become familiar with a system using operational techniques and procedures. The system or capability will be employed in an operational configuration with sufficient operational safeguards in place to prevent mission failure. System effectiveness and suitability will be evaluated to support an OA decision. When a system or capability enters trial period it is used to support the designated mission and is considered operational. As such, mission operators must have sufficient documentation and training to accomplish the mission before trial period entry. The length of trial period is determined based on factors such as level of risk, acceptance criteria, and evaluation needs. The trial period length may be 30 days or longer for new systems, but can be as short as 72 hours for a low-risk minor modification. The OA Approval Authority or designated representative will make the final determination on length of trial period based on stakeholder recommendation. For space systems, trial period optimally occurs after OT&E; however, OT&E and trial period can take place concurrently, if necessary. For cyberspace systems, trial period entry must occur prior to operational testing that occurs on the live network. In some cases, a trial period may not occur at all if it is not feasible and operational readiness can be determined via other means. Fallback procedures will be identified in the event the system, capability, or modification in trial period causes a significant detrimental impact to the mission. Trial period ends with either an Operational Acceptance decision, or the system, capability, or modification is removed from trial period status due to significant operational issues which require resolution.

3.2.3.1. Trial Period Review Panel (TPRP). A TPRP convenes to ensure the system, capability, or modification is ready to enter or exit trial period. The TPRP chair is normally the OA Approval Authority, except when the AFSPC/CC is the OA Approval

Authority, in which case the HQ AFSPC/A2/3/6 Director will chair the TPRP. When the OA Approval Authority is the HQ AFSPC/A2/3/6 Director or a Division Chief, they may delegate TPRP chair responsibilities. TPRP membership known as stakeholders consists of, but is not limited to, representatives from: appropriate HQ AFSPC Directorates; Program Management Office (PMO); NAF; operational units; Operational Test Organization (OTO), as well as other MAJCOMS and/or Services as applicable.

3.2.3.1.1. Trial Period Entry. A TPRP is held prior to trial period entry to ensure entry criteria are met and the system, capability, or modification is ready to enter trial period. Ideally, the TPRP entry will occur once all trial period entry criteria have been satisfied. This provides the approval authority the information necessary to make a trial period entry decision. There are instances when certain criteria are not complete, for example, functional checks on the operational system following a software load. In these cases, a conditional trial period entry approval may be granted and the trial period entry memo will clearly state the conditions that must be met prior to the unit entering trial period. The TPRP, with input from stakeholders, results in a trial period entry decision. Trial period entry approval will be documented in a memorandum signed by the appropriate approval authority. Sample trial period entry memorandums are located in **Attachment 7**.

3.2.3.1.2. Trial Period Exit. A TPRP is also conducted prior to trial period exit to review how the system, capability, or modification performed during trial period and ensure exit/OA criteria are met. This TPRP, with input from stakeholders, results in a trial period exit decision and an OA of the system, capability, or modification. The exit TPRP normally serves the purpose of an operational acceptance decision brief, except when the decision authority is the AFSPC/CC, in which case the HQ AFSPC/A2/3/6 Director will chair the exit TPRP. The HQ AFSPC/A2/3/6 Director would then provide the trial period exit recommendation to the AFSPC/CC at the OA decision brief. For low risk modifications with a short trial period (e.g., 72 hours) the exit TPRP may be waived, in which case the conditions for trial period exit will be established at the entry TPRP and documented in the entry memorandum. Sample trial period exit memorandums are located in **Attachment 7**.

3.2.4. Operational Acceptance. OA is the final decision point in the Operational Acceptance Process. With OA, the Approval Authority declares the new system, new capability or modification of a fielded system is able to support its operational mission and is ready for presentation to the combatant command, if required. Stakeholders will confirm readiness for OA within their respective area and make a recommendation to the Approval Authority on whether to OA, OA with a lien(s), or not to OA. OA is documented with an OA memorandum signed by the Approval Authority, or their delegated representative. The rationale supporting the OA decision will be documented in the OA memorandum (e.g., why it was accepted, accepted with lien(s), or not accepted). Sample OA memorandums are located in **Attachment 7**. The OA'd system, capability or modification will be made available for employment by the operational users IAW the MFP (or fielding strategy) and OA Plan. If AFSPC will not be conducting OA, then the NAF internal acceptance process will be used.

3.2.4.1. Operational Acceptance Decision Brief. An OA decision brief will be provided to the AFSPC/CC when he/she is the approval authority for the system in trial period. As

part of this OA Decision Brief, HQ AFSPC/A2/3/6 Director will provide a trial period exit recommendation. The respective HQ AFSPC Division responsible for the system or capability is responsible for the brief. When the OA Approval Authority resides at the HQ AFSPC/A2/3/6 Director or below, the TPRP for exit can serve as the OA decision brief. The OA memorandum may be signed at the conclusion of the decision brief, or sometime thereafter, but OA occurs once the memorandum is signed. Submit requests for current template to the AFSPC/A2/3/6X Workflow at **afspc.a3x.workflow@us.af.mil.**

Chapter 4

ORGANIZATIONAL ROLES AND RESPONSIBILITIES

4.1. AFSPC/CC.

4.1.1. OA/IOC/FOC Approval Authority unless delegated.

4.1.2. Declares new systems, new capabilities or permanent modifications have met OA criteria and/or have achieved IOC/FOC by means of an OA decision or IOC/FOC declaration (may be delegated).

4.2. HQ AFSPC/A1.

4.2.1. In coordination with mission owners, assists in the development and validation of manpower requirements and organizational constructs.

4.2.2. Confirms there are no unmitigated personnel issues, or remaining unmitigated issues are low risk, at the OA/IOC/FOC decision point.

4.3. HQ AFSPC/A2/3/6.

4.3.1. Manages the Operational Acceptance Process.

4.3.2. Executes delegated AFSPC/CC OA responsibilities.

4.3.3. Confirms there are no unmitigated Intelligence, Surveillance and Reconnaissance (ISR), operations or communications issues, or remaining unmitigated issues are low risk, at the OA/IOC/FOC decision point.

4.3.4. Develops, in concert with HQ AFSPC/A5/8/9, initial system concept to describe how the system (existing or new) will be employed for a specific function/mission in one or more types of joint, multinational operations, or environments IAW AFI 10-2801. Performs subsequent reviews/updates according to established Command guidelines and scheduling.

4.3.5. Works with HQ AFSPC/A5/8/9 and HQ AFSPC/A4 to develop operational requirements for capability modifications to existing systems IAW AFI 10-601_AFSPCSUP and AFI 63-131_AFSPCSUP.

4.3.6. Leads OA planning/strategy for modifications to clearly identify OA requirements and capability delivery expectations. Participates in testing strategy development.

4.3.7. Determines if OA Plan is required to supplement the MFP. Leads development and coordination of the OA Plan. Develops criteria for operational acceptance aligned with the capability's operational requirements.

4.3.8. The respective HQ AFSPC Division chairs the Risk Assessment Team for cyberspace ROA and provides management and administrative functions IAW **Attachment 5**.

4.3.9. Requests operational testing for systems under sustainment to support MAJCOM OA decision and concur with scope and level of operational test recommended IAW AFSPCI 99-103.

4.3.10. Chairs the OT&E Test Readiness Review Board (TRRB) for high risk operational tests (e.g., Force Development Evaluation [FDE], Operational Utility Evaluation [OUE]), unless HQ AFSPC/A2/3/6 has delegated decision authority.

4.3.11. For ISR and intelligence-sensitive programs, ensures intelligence support functions/products/services are identified and available (e.g., processing, exploitation, and dissemination architecture). If support elements are not available, identifies the deficiency, impact, and estimated deficiency resolution date. Intelligence sensitivity designation is performed by intelligence support to acquisition personnel in HQ AFSPC/A2/3/6. This is a Senior Intelligence Officer (SIO) responsibility per AFI 14-111, *Intelligence in Force Modernization*.

4.3.12. Intelligence acquisition personnel participate in all panels, boards, and working groups convened to evaluate the readiness of all ISR and intelligence-sensitive programs. The status of all ISR and intelligence-sensitive programs will be reported to the SIO IAW AF policy requirements.

4.3.13. For spectrum dependent systems, reviews spectrum supportability certification and associated spectrum supportability risk assessment. Determines appropriate National and/or Host Nation spectrum supportability approval has been achieved. Reviews spectrum related risks and constraints to determine impact to required operational capabilities.

4.3.14. Reviews cyberspace security packages for risk determination and authorization consideration. Reviews computer resources, cross domain, cryptologic concerns, and information technology documents as required. Serves as the AFSPC Authorizing Official (AO) for the Air Force Information Network (AFIN) and AFSPC Mission Systems. Receives recommendations regarding cyberspace security posture and issues appropriate Authorization to Operate, Interim Authorization to Test or Authority to Connect authorization decisions based on the assessed level of risk.

4.3.15. Performs quality assessment of metric data (observations) when a new operational sensor is added, or changes are made to an existing sensor, and performs numerical validation on new or changed algorithms to support trial period entry/exit and OA when applicable.

4.3.16. The respective HQ AFSPC/A2/3/6 Division ensures briefs are prepared and available for TPRP and OA decisions. Briefs may be prepared by other offices. For example, the PMO may lead in preparation of TPRP/OA briefs for new systems/capabilities, while the operating unit often prepares the TPRP/OA briefs for modifications to systems they operate.

4.3.17. Prepares the operational acceptance memorandum or IOC/FOC declaration memorandum for AFSPC/CC, or the delegated authority.

4.3.18. Assumes lead operational responsibility of the system or capability after an OA or IOC decision depending on the system or capability.

4.4. HQ AFSPC/A4.

4.4.1. Serves as the command focal point for Life Cycle Logistics management.

4.4.2. Coordinates system/program MFP; ensures all aspects of materiel fielding are considered and documented appropriately by the PM.

4.4.3. Confirms there are no unmitigated logistics or sustainment issues, or remaining unmitigated issues are low risk, at the OA/IOC/FOC decision point.

4.4.4. Manages the System Modification Process IAW AFI 63-131, AFI 10-601, and applicable AFSPC Supplements to those instructions.

4.4.5. Serves as the Configuration Review Board Chair Co-Chair with HQ AFSPC/A5/8/9 IAW AFI 63-131 AFSPCSUP.

4.5. HQ AFSPC/A5/8/9.

4.5.1. Manages the authoring and review of HQ AFSPC concepts (typically the requirement lead for operating concepts and the operations lead for systems concepts) IAW AFI 10-2801. HQ AFSPC/A5XC works with the appropriate directorate to author concepts or perform subsequent reviews/updates according to established Command guidelines and scheduling.

4.5.2. Develops Performance Parameters/Attributes (key performance parameters [KPP], key system attributes [KSA], or additional performance attributes [APA]) with minimum threshold/objective values as part of the CDD or capability production document (CPD) for acquisition programs. Also develops KPP/KSA/APA tables, as required for modifications that introduce new capability to existing systems per AFI 10-601_AFSPCSUP.

4.5.3. Maintains awareness of developmental program status through direct interface with developing agencies to include oversight of Science and Technology and DT&E planning for both traditional and rapid acquisition.

4.5.4. Prior to program transition, serves as the primary interface between Program Management Office(s) and the Operational Wing(s) and facilitates resolution of issues concerning the delivery of new capabilities among all AFSPC and external organizations.

4.5.5. Requests operational testing for systems under acquisition to support MAJCOM OA decision and concur with scope and level of operational test recommended IAW AFSPCI 99-103.

4.5.6. Confirms there are no unmitigated acquisition issues, or remaining unmitigated issues are low risk, at the OA/IOC/FOC decision point.

4.5.7. Provides oversight for the development, acquisition and fielding of new capabilities IAW AFSPCI 38-9, *HQ Air Force Space Command Organizations and Functions*. Assists in operational responsibility transfer to HQ AFSPC/A2/3/6 at OA and/or IOC.

4.5.8. Serves as the Configuration Review Board Chair Co-Chair with HQ AFSPC/A4 IAW AFI 63-131_AFSPCSUP.

4.6. HQ AFSPC/FM.

4.6.1. For Special Access Program (SAP)/Special Access Required (SAR) programs, reviews cyberspace security packages for risk determination and authorization consideration and computer resources, cross domain, cryptologic concerns, and information technology documents as required.

4.6.2. Confirms there are no unmitigated funding or security issues, or remaining unmitigated issues are low risk, at the OA/IOC/FOC decision point for SAP/SAR programs.

4.7. HQ AFSPC/SE.

4.7.1. Reviews safety issues, as required.

4.7.2. Confirms there are no unmitigated safety issues at the OA/IOC/FOC decision point, or that remaining unmitigated issues are accepted at the appropriate level.

4.8. SMC and AFLCMC (Program Management Office).

4.8.1. Executes life cycle specific responsibilities for space and cyberspace system developing agencies documented in DoDI 5000.02 and AFI 63-101/20-101. **(T-1)**.

4.8.2. Develops and coordinates the MFP or fielding strategy across the community of identified stakeholders IAW AFI 63-101/20-101. **(T-1)**.

4.8.3. Creates, modifies and delivers verified technical orders prior to operational testing to include operator and maintainer checklists IAW Technical Order 00-5-3, *AF Technical Order Life Cycle Management,* and Technical Order 00-5-1, *AF Technical Order System.* ictect**(T-2)**.

4.8.4. Provides initial training courses and materials to the initial cadre of operators and maintainers prior to operational testing. **(T-2)**.

4.8.5. Track, evaluate, and take appropriate action on deficiencies in accordance with AFI 99-103 and Technical Order 00-35D-54, *USAF Deficiency Reporting, Investigation, and Resolution.* ictect**(T-2)**.

4.8.6. Establishes Integrated Test Team IAW AFI 99-103 and AFSPCI 99-103. **(T-1)**.

4.8.7. Ensures a Lead Developmental Test and Evaluation Organization (LDTO) is selected and designated as early as possible (i.e., at or before MS-A) IAW AFI 99-103. **(T-1)**.

4.8.8. Develops the program's Test & Evaluation Master Plan (TEMP) IAW AFI 99-103 to ensure testable OA criteria are properly evaluated. **(T-1)**.

4.8.9. Manages the process to certify system readiness to enter dedicated operational test IAW AFMAN 63-119. **(T-1)**.

4.8.10. Notifies the appropriate division(s) within HQ AFSPC if the lack of execution or a delay in execution of the Operational Acceptance Process will significantly impact cost, schedule, or performance of new capabilities or modifications of fielded systems. **(T-2)**.

4.8.11. Participates in OA planning/strategy for sustainment modifications to clearly identify OA requirements, testing strategy and capability delivery expectations. **(T-2)**.

4.8.12. Certifies there are no unmitigated operational risks or deficiencies affecting the performance or fielding of the system, or remaining unmitigated risks or deficiencies are accepted by the appropriate authority; a safety release, if required, has been completed IAW AFI 91-202, *The US Air Force Mishap Prevention Program* or applicable safety guidance. **(T-2)**.

4.8.13. Delivers new/modified system/capability into the operational environment ready for operational community use. **(T-2)**.

4.9. AFNIC.

4.9.1. Provide technical assessment of capabilities to the OA Authority.

4.10. Numbered Air Forces.

4.10.1. Performs quality assessment of metric data for accuracy and completeness when a new operational sensor is added or changes are made to an existing sensor to support trial period entry/exit and OA in coordination with HQ AFSPC/A2/3/6Z.

4.10.2. Establishes an internal process utilizing NAF resources to address operational acceptance support, scheduling and schedule deconfliction, deployment support, required training, required manning, additional required resourcing, and other programmatic issues.

4.10.3. Acts as OCR to provide operator input to AFSPC during installation reviews for each operational capability and ensures any deficiencies are identified and documented.

4.10.4. Supports test and evaluation activities, as required and resourced.

4.10.5. Ensures receipt of sufficient training.

4.10.6. Confirms at the OA/IOC/FOC decision point that there are no unmitigated issues, or remaining unmitigated issues are low risk, and the NAF and its subordinate/supporting elements are ready to execute the mission. If unmitigated issues are identified, then the NAF should notify AFSPC immediately to ensure deficiencies are addressed.

4.10.7. Tasks Space and Cyberspace Wings to conduct actions outlined in **paragraph 4.11** of this document and provide results to the appropriate AFSPC directorate.

4.10.8. Participates in OA planning/strategy for sustainment modifications to clearly identify OA requirements, testing strategy and capability delivery expectations.

4.10.9. Requests operational testing to support NAF OA decision, as required, and concurs with scope and level of operational test recommended IAW AFSPCI 99-103.

4.10.10. Provides OA approval recommendation for OA Decision Authority's consideration.

4.11. Space and Cyberspace Wings.

4.11.1. Reviews technical data in OA documentation for accuracy and completeness and provides input to appropriate NAF. **(T-2)**.

4.11.2. Reviews initial and critical sparing plans in OA documentation for accuracy and completeness and provides inputs to appropriate NAF. **(T-2)**.

4.11.3. Utilizes NAF internal process to address operational acceptance support, scheduling and schedule deconfliction, deployment support, required training, required manning, additional required resourcing, and other programmatic issues and provide information to the parent NAF.

4.11.4. Supports AFSPC and NAF in the conduct of the appropriate deployment and employment reviews for each operational capability; ensures any deficiencies are identified and documented and submitted to NAF. **(T-2)**.

4.11.5. Participates in OA planning/strategy for sustainment modifications to clearly identify OA requirements, testing strategy, and capability delivery expectations. **(T-2)**.

4.11.6. Defines and coordinates OA Criteria with respective HQ AFSPC/A2/3/6 Division, Program Management Office, NAF, Group, and Squadron(s). **(T-2)**.

4.11.7. Supports test and evaluation activities as required and resourced. **(T-2)**.

4.11.7.1. 721st Communications Squadron is responsible for assuring the integrity of the Space Surveillance Network during all test, evaluation and exercise activities. **(T-3)**.

4.11.8. Provides available operators and maintainers for initial cadre training provided by the PMO, conducts conversion training (On the Job Training), and reports current number of trained operators and maintainers. **(T-2)**.

4.11.9. Ensures operational units are ready to assume operational responsibilities for the system upon OA decision. **(T-2)**.

4.11.10. Provides feedback to NAF on PMO provided training. Annotate if training is sufficient or if there are deficiencies in the provided training based on NAF defined criteria.

4.11.11. Provides OA approval recommendation through NAF for OA Decision Authority's consideration.

STEPHEN N. WHITING, Brigadier General, USAF
Director of Integrated Air, Space,
Cyberspace and ISR Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

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DoDI 8510.01, *Risk Management Framework (RMF) for DoD Information Technology (IT),* 12 March 2014

DoD Product Support Manager Guidebook, April 2011

CJCSI 5123.01G, *Charter of the Joint Requirements Oversight Council (JROC),* 12 Feb 2015

Manual for the Operation of the Joint Capabilities Integration and Development System (JCIDS), 12 February 2015

SI 534-22, *Mission Integrity, Change Control Management, and Test Control for the Integrated Tactical Warning and Attack Assessment (ITW/AA) System,* 25 March 2011

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AFI 10-601 AFSPCSUP, *Operational Capability Requirements Development,* 10 June 2014

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TO 00-5-1, *AF Technical Order System*, 01 Oct 2014

TO 00-5-3, *AF Technical Order Life Cycle Management*, 01 Apr 2015

TO 00-5-16, *Software Managers and Users Manual for the USAF Automated Computer Program Identification Number System (ACPINS)*, 15 November 2015

TO 00-20- 2, *Maintenance Data Documentation*, 1 November 2012

TO 00-35D-54, *USAF Deficiency Reporting, Investigation, and Resolution,* 1 September 2015

Memorandum of Agreement on Air Force Space Command Information Operations Support to Air Combat Command, 14 June 2010

Prescribed Forms

This instruction does not contain any Prescribed Forms.

Adopted Forms

AF 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

ACAT—Acquisition Category

AF—Air Force

AFI—Air Force Instruction

AFIN—Air Force Information Network

AFLCMC—Air Force Life Cycle Management Center

AFMAN—Air Force Manual

AFNET—Air Force Network

AFPAM—Air Force Pamphlet

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFRCO—Air Force Rapid Capabilities Office

AFRL—Air Force Research Laboratory

AFSPC—Air Force Space Command

AFSPCI—Air Force Space Command Instruction

AFTENCAP—Air Force Tactical Exploitation of National Capabilities

APA—additional performance attributes

ATC—Authority to Connect

C2—Command and Control

CDD—Capability Development Document

CONOPS—Concept of Operations

CPD—Capability Production Document

CJCSI—Chairman of the Joint Chiefs of Staff Instruction

COA—Course of Action

CWS—Cyberspace Weapons System

DAA—Designated Approval Authority

DARPA—Defense Advanced Research Projects Agency

DOC—Designed Operational Capability

DoD—Department of Defense

DoDI—Department of Defense Instruction

DOTMLPF-P—Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities and Policy

DR—Deficiency Report

DRB—Deficiency Review Board

DT&E—Developmental Test and Evaluation

EGS—Enterprise Ground Service

EITDR—Enterprise Information Technology Enterprise Data Repository

eMASS—Enterprise Mission Assurance Support Services

EMAWG—Experimentation Mission Assignment Working Group

EOL—End of Life

EXORD—Execute Order

F3I—Form, Fit, Function, Interface

FD—Full Deployment

FDD—Full Deployment Decision

FDE—Force Development Evaluation

FISMA—Federal Information Security Management Act

FMS—Foreign Military Sales

FOC—Full Operational Capability

FRAGO—Fragmentary Order

GO—General Officer

HQ—Headquarters

IATT—Initial Authorization to Test

IAW—In Accordance With

I&C—Installation and Checkout

ICD—Initial Capabilities Document

ICS—Interim Contract Support

IOC—Initial Operational Capability

ISR—Intelligence, Surveillance and Reconnaissance

ITT—Integrated Test Team

ITW/AA—Integrated Tactical Warning and Attack Assessment

JCIDS—Joint Capabilities Integration and Development System

JCTD—Joint Capability Technical Demonstration

JFCC SPACE—Joint Functional Component Commander – Space

JROC—Joint Requirements Oversight Council

JUON—Joint Urgent Operational Need

KPP—key performance parameters

KSA—key system attributes

LDTO—Lead Developmental Test and Evaluation Organization

MAIS—Major Automated Information System

MAJCOM—Major Command

MDA—Milestone Decision Authority

MDD—Materiel Development Decision

MFP—Materiel Fielding Plan

MIT/LL—Massachusetts Institute of Technology/Lincoln Laboratory

MS—Milestone

NAF—Numbered Air Force

NASIC—National Air and Space Intelligence Center

NI—NORAD Instruction

NORAD—North American Aerospace Defense Command

NRL—Naval Research Laboratory

NRO—National Reconnaissance Office

NTDS—Non-Traditional Data Source

OA—Operational Acceptance

OGA—Other Government Agencies

O&M—Operations and Maintenance

ORS—Operationally Responsive Space

OT&E—Operational Test and Evaluation

OTO—Operational Test Organization

OUE—Operational Utility Evaluation

PEO—Program Executive Officer

PM—Program Manager

PMO—Program Management Office

QRC—Quick Reaction Capability

R&D—Research and Development

RAT—Risk Assessment Team

RMF—Risk Management Framework

ROA—Responsive Operational Acceptance

RTOI—Real-Time Operations and Innovation

S&T—Science and Technology

SAP—Special Access Program

SAR—Special Access Required

SE—Safety

SI—Strategic Command Instruction

SIO—Senior Intelligence Officer

SMC—Space and Missile Systems Center

SME—Subject Matter Expert

SSDP—Space Security and Defense Program

SSRA—Spectrum Supportability Risk Assessment

SVNS—Standard Version Numbering System

SW—Space Wing

T&E—Test and Evaluation

TEMP—Test and Evaluation Master Plan

TO—Technical Order

TP—Trial Period

TPRP—Trial Period Review Panel

TPT—Training Planning Team

TRR—Test Readiness Review

TRRB—Test Readiness Review Board

TTP—Tactics, Techniques and Procedures

USAFWC—United States Air Force Warfare Center

USSTRATCOM—United States Strategic Command

UON—Urgent Operational Need

UTC—Unit Type Code

WIT—Watch Item

WS—Weapon System

WST—Weapon System Team (for Cyberspace weapon systems)

WSTL—Weapon System Team Lead

Terms

Acquisition—The conceptualization, initiation, design, development, testing, contracting, production, deployment, and disposal of a directed and funded effort that provides a new, improved, or continued materiel, weapon, information system, logistics support, or service capability in response to an approved need.

Capability—The ability to achieve a desired effect under specified standards and conditions through combinations of means and ways across the doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTmLPF-P) to perform a set of tasks to execute a specified course of action.

Configuration Item—A Configuration Item is a hardware, firmware, or software component, or combination thereof, that satisfies an end use function and is designated for separate configuration management. Hardware Configuration Items are typically referred to by an alphanumeric identifier, while software Configuration Items are typically assigned a computer program identification number.

Deficiency—The degree of inability to successfully accomplish one or more mission tasks or functions required to achieve mission or mission area objectives. In contract management – any part of a proposal that fails to satisfy the government's requirements (Defense Acquisition Acronyms and Terms).

Deficiency Report (DR)—Report governed by TO-00-35D-54, USAF Deficiency Reporting, Investigation, and Resolution, that documents deficiencies.

Deficiency Review Board (DRB)—The DRB provides a forum for capturing, documenting, and discussing deficiencies encountered during the test and trial period phases of a program. DRB

evaluates anomalous system behavior and assigns (or updates) a problem category and subcategory IAW TO 00-35D-54, USAF Deficiency Reporting, Investigation, and Resolution.

Developmental Test and Evaluation (DT&E)—Test and evaluation conducted to evaluate design approaches, validate analytical models, quantify contract technical performance and manufacturing quality, measure progress in system engineering design and development, minimize design risks, predict integrated system operational performance (effectiveness and suitability) in the intended environment, and identify system problems (or deficiencies) to allow for early and timely resolution.

Early Use—For the purposes of this instruction, early use is the use of an asset prior to acceptance criteria being met and an Operational Acceptance decision being provided.

Fielding—Occurs when supported and supporting commands collaboratively plan and execute the delivery and bed-down of an operationally effective and suitable platform or system, or a major system modification/upgrade, from a total system capability perspective, that is sustainable over its planned life cycle.

Full Operational Capability (FOC)—Full attainment of the capability to effectively employ a weapon, item of equipment or system of approved specific characteristics, which is manned and operated by a trained, equipped and supported military force or unit.

Initial Operational Capability (IOC)—That first attainment of the capability to effectively employ a weapon, item of equipment, or system of approved specific characteristics with the appropriate number, type, and mix of trained and equipped personnel necessary to operate, maintain, and support the system.

Installation and Checkout (I&C)—AFSPC units conduct I&C to support the operational acceptance of sustaining engineering activities and processing equipment swaps covered by operational technical manuals and checklists. I&C activities are also appropriate for routine updates to operational databases which do not directly affect or have the potential to affect mission accomplishment and following maintenance of software that does not add new capabilities to the system (e.g., maintenance releases, database changes, COTS updates). Additionally, I&C activities may be used to support acceptance of PMO modifications being installed at multiple sites after the initial site passes a successful OT&E.

Life Cycle—The span of time associated with a system, subsystem, or end item that begins with the conception and initial development of the requirement, continues through development, acquisition, fielding, and sustainment until the time it is either consumed in use or disposed of as being excess to all known materiel requirements.

Maintenance Action—A maintenance action is any routine or recurring effort (to include software Block, Cycle, or planned program updates), at the field or depot level that is conducted to sustain the operational availability of an in-service end item of equipment. Maintenance actions may include refurbishment and overhaul of equipment, removal and replacement of components, and the repair or remanufacturing of reparable components.

Milestone Decision Authority (MDA)—The individual designated to approve entry of an acquisition program into the next phase.

Milestones—Major decision points that separate the phases of an acquisition program.

Modification—For the purposes of this instruction, a modification is defined as an alteration to the form, fit, function, or interface (F3I) of an in-service AF hardware or software Configuration Item.

Operational Acceptance—The final decision point in the Operational Acceptance Process when the Approval Authority declares the new system, new capability or modification of a fielded system is able to support its operational mission and is ready for presentation to the combatant command, if required. OA signifies that the new system, new capability, or modification to an existing system meets operational mission requirements, that necessary resources and support are in place, and that system and capability risks are acceptable to employ it as an operational capability. That point in time at which operational responsibility and maintenance support officially transfers to AFSPC as lead MAJCOM and to the operational organization that will operate and maintain the system.

Operational Test and Evaluation (OT&E)—Test and evaluation conducted in as realistic an operational environment as possible to estimate the prospective system's operational effectiveness and operational suitability. In addition, operational test and evaluation provides information on organization, personnel requirements, doctrine and tactics. In turn, it also provides data to support or verify material in operating instructions, publications, and handbooks.

Operational Acceptance Process—Formal AFSPC process that culminates in an operational acceptance decision of a new system, new capability, or modification of a fielded system ensuring it meets the minimum requirements and can efficiently, effectively, and safely support mission operations.

Program (Acquisition)—A defined effort funded by research, development, test, and evaluation (RDT&E) and/or procurement appropriations with the express objective of providing a new or improved capability in response to a stated mission need or deficiency.

Program—Systems, subsystems, end items, services, or activities on the AF Acquisition Master List (AML), weapon or business system in sustainment, weapon systems designated in AFPD 10-9 (Lead Command Designation and Responsibilities for Weapon Systems), or identified as Services Category activities.

Program Executive Officer (PEO)—A military or civilian official with primary responsibility for directing one or more Major Defense Acquisition Programs (MDAPs) and for assigned major system and non-major system acquisition programs.

Program Manager (PM)—The DoDI 5000.02 designated individual with responsibility for and authority to accomplish program objectives for development, production, sustainment, and disposal to meet the user's operational needs. The PM for acquisition programs shall be accountable for credible cost, schedule, performance, and materiel readiness to the MDA.

Responsive Operational Acceptance (ROA)—An adaptive process for delivery of technology for operational employment. ROA performs an early and objective assessment of the urgency and complexity of a given technology delivery to characterize change significance, mission impacts, and acceptable risks for rapid employment. The operational acceptance authority is delegated to the lowest level possible based on the complexity of the technology delivery. Early employment and risk acceptance is based on the urgency of the desired capability or effect. This

process allows for capability delivery as fast as possible, as deliberately as necessary, and at the appropriate acceptance authority level.

Risk—A measure of future uncertainties in achieving program performance goals and objectives within defined cost, schedule, and performance constraints. Risks have three components: a future root cause (yet to happen), which, if eliminated or corrected, would prevent a potential consequence from occurring; a probability (or likelihood) assessed at the present time of that future root cause occurring; and a consequence (or effect) of that future occurrence. Information system-related security risks are those that arise from the loss of confidentiality, integrity, or availability of information or information systems

Risk Analysis—The process of examining each identified program and process risk, isolating the cause, and determining the impact. Risk impact is defined in terms of its probability of occurrences, its consequences, and its relationship to other risk areas or processes. Consequences are typically identified and analyzed in terms of performance, schedule, and cost.

Risk Management Framework—A structured approach used to oversee and manage risk for an enterprise.

Stakeholders—Individual or organizational entities (users, developers, acquirers, technologists, testers, budgeters, sustainers, and industry) that are, or will be, associated with implementing and supporting the associated system, subsystem, or end-item capability requirements.

Sustainment—Continuing materiel support which consists of the planning, programming, and execution of a logistics support strategy for a system, subsystem, or major end item to maintain operational capabilities from OA through disposal.

System—Any organized assembly of resources and procedures united and regulated by interaction or interdependence to perform a set of specific functions.

Trial Period—A formally scheduled period of time to demonstrate the mission capabilities and operational suitability of a system or capability in an operational environment. When a system or capability enters trial period it is employed to support the designated mission and is considered operational. Trial period is the final evaluation step prior to an Operational Acceptance decision. The OA Approval Authority or designated representative makes the final determination on length of trial period based on stakeholder recommendation.

Attachment 2

OPERATIONAL ACCEPTANCE PROCESS STEPS

A2.1. New System/Capability. The Operational Acceptance Process is used to accept new systems or capabilities from acquisition to operational status. These efforts require close coordination and working relationships between HQ AFSPC, the acquirer, PMO, NAF(s) and operational unit(s). The OA Approval Authority is based on the authority level depicted in **Table 2.1** and defined in **paragraph 2.6.1**. The steps and products developed for the Operational Acceptance Process described below may be tailored to meet the operational need for the specific capability being accepted for operations.

A2.1.1. Develop MFP IAW AFI 63-101/20-101 to support the transition from acquisition to operations (OPR: PM); if necessary, (see **para 2.5**) develop OA Plan for Capability Acceptance (OPR: HQ AFSPC/A2/3/6 Division responsible for capability).

A2.1.1.1. Determine OA Approval Authority based on program level or activity (OPR: HQ AFSPC/A2/3/6 Division responsible for capability).

A2.1.1.2. Staff OA Plan with requisite stakeholders (OPR: HQ AFSPC/A2/3/6 Division responsible for capability).

A2.1.1.3. Present OA Plan to OA Approval Authority for approval (OPR: HQ AFSPC/A2/3/6 Division responsible for capability).

A2.1.2. Conduct DT&E/OT&E IAW AFI 99-103 and AFSPCI 99-103 (LDTO/OTO).

A2.1.2.1. Conduct TRRBs, as required IAW AFSPCI 99-103 (OPR; HQ AFSPC/A2/3/6ZT).

A2.1.3. Convene Watch Item (WIT)/Deficiency Review Board (DRB), as required to review, prioritize, and report WITs and deficiency reports to the program manager (LDTO, OTO).

A2.1.4. Convene TPRP for trial period entry decision (OPR: HQ AFSPC/A2/3/6 Division responsible for capability; OCR: PMO; Wing/Unit).

A2.1.4.1. Provide information about system (e.g. system description, architecture, and schedule).

A2.1.4.2. Review trial period entry criteria to determine readiness to enter trial period, to include OT&E results (OTO) and WIT/DRB identified and documented deficiencies (PMO).

A2.1.4.3. OA Approval Authority approves (or disapproves) trial period entry.

A2.1.5. Enter trial period (OPR: HQ AFSPC/A2/3/6; OCR: Wing/Unit).

A2.1.5.1. Conduct trial period (Unit).

A2.1.6. Identify, document deficiencies in accordance with T.O. 00-35D-54 and submit to HQ AFSPC/A2/3/6 Division and PM (Unit).

A2.1.7. Convene DRB, if required (OPR: HQ AFSPC/A2/3/6 Division responsible for the capability that has deficiencies identified during trial period; OCR: Wing/Unit).

A2.1.8. Convene TPRP for trial period exit/OA decision (OPR: HQ AFSPC/A2/3/6 Division responsible for capability; OCR: Wing/Unit).

A2.1.8.1. Brief trial period results and status of all OA criteria to OA Approval Authority (OPR: HQ AFSPC/A2/3/6 Division responsible for capability; OCR: PMO Wing/Unit).

A2.1.8.2. OA Approval Authority approves (or disapproves) trial period exit and OA's the system, capability or modification based on satisfaction of OA criteria.

A2.1.8.2.1. If AFSPC/CC is the OA Approval Authority, the HQ AFSPC/A2/3/6 Director makes a recommendation to AFSPC/CC for trial period exit and OA.

A2.1.8.2.2. If the HQ AFSPC/A2/3/6 Director is the OA Approval Authority, recommendations for OA will be developed by the appropriate HQ AFSPC/A2/3/6 Division Chief for approval.

A2.1.8.2.3. If trial period exit/OA is disapproved, OA Approval Authority determines disposition of the new capability.

A2.2. Sustainment Modifications. The Operational Acceptance Process is also used to OA permanent sustainment modifications of fielded systems. These efforts require close coordination and working relationships between the PEO, HQ AFSPC, PMO, NAF(s) and operational unit(s). The OA Acceptance Authority for these modifications is based on the authority level depicted in **Table 2.1** and defined in **paragraph 2.6.1**. The steps and products developed for the Operational Acceptance Process described below may be tailored to meet the operational need for the specific sustainment modification being implemented.

A2.2.1. Determine OA Approval Authority based on modification level (OPR: HQ AFSPC/A2/3/6 Division responsible for capability).

A2.2.2. Conduct DT&E/OT&E/I&C IAW AFI 99-103 and AFSPCI 99-103 (LDTO/OTO/Unit).

A2.2.2.1. Conduct TRRBs, as required IAW AFSPCI 99-103 (OTO if applicable, PMO).

A2.2.3. Convene WIT/DRB, as required to review, prioritize, and report WITs and deficiency reports to the program manager (LDTO, OTO if applicable).

A2.2.4. Develop and present trial period entry briefing (OPR: HQ AFSPC/A2/3/6 Division responsible system being modified; OCR: Wing/Unit, PMO).

A2.2.4.1. Provide information about the sustainment modification (e.g., purpose, what it does, impact to operations).

A2.2.4.2. Review trial period entry criteria to determine readiness to enter trial period, to include OT&E or I&C results (OTO if OT&E; unit if I&C) and WIT/DRB identified and documented deficiencies (PMO).

A2.2.4.3. OA Approval Authority approves (or disapproves) trial period entry.

A2.2.5. Enter trial period (OPR: HQ AFSPC/A2/3/6; OCR: Wing/Unit).

A2.2.5.1. Conduct trial period (Unit).

A2.2.6. Identify, document deficiencies in accordance with T.O. 00-35D-54 and submit to HQ AFSPC/A2/3/6 Division and PM (Unit).

A2.2.7. Convene WIT/DRB, if required (OPR: HQ AFSPC/A2/3/6 Division responsible for the capability that has deficiencies identified during trial period; OCR: Wing/Unit).

A2.2.8. Convene TPRP for exit/OA decision (OPR: HQ AFSPC/A2/3/6 Division responsible for capability; OCR: Wing/Unit).

A2.2.8.1. Brief trial period results and status of all OA criteria to OA Approval Authority (OPR: Wing/Unit; OCR: HQ AFSPC/A2/3/6 Division responsible for system.

A2.2.8.2. OA Approval Authority approves (or disapproves) trial period exit and OA's the capability or modification based on satisfaction of OA criteria.

A2.2.8.2.1. If the HQ AFSPC/A2/3/6 Director is the OA Approval Authority, the HQ AFSPC/A2/3/6 Division Chief makes a recommendation to the HQ AFSPC/A2/3/6 Director for trial period exit and OA.

A2.2.8.2.2. If HQ AFSPC/A2/3/6 Division Chief is the OA Approval Authority, recommendations for OA will remain within that HQ AFSPC/A2/3/6 Division for approval.

A2.2.8.2.3. If trial period exit/OA is disapproved, OA Approval Authority determines disposition of modification.

Attachment 3

OPERATIONAL ACCEPTANCE PLAN TEMPLATE

A3.1. The purpose of the OA Plan is to: Detail the specific actions, timelines, criteria and organizational responsibilities necessary to accept a new system/capability from the acquirer and employ it as an operational capability. Its focus is post-PEO Certification, from operational testing through trial period to OA. The OA Plan is tailored for the specific system/capability. This template may be used to develop the OA Plan.

A3.2. System/Capability Overview.

A3.2.1. System/Capability Description. High level description of the system/capability and how it will integrate with, support, modify, or replace legacy capability. Include depiction of system architecture and the System Under Test, with a clear description of system physical and logical interface boundaries that identify the range and limits of OA criteria applicability.

A3.2.2. Responsible HQ AFSPC/A2/3/6 Division.

A3.3. Approval Authority/OA Criteria.

A3.3.1. Acquisition Category (ACAT) level.

A3.3.2. OA Approval Authority (this is the recommended OA Approval Authority based on **Table 2.1** or leadership determination if different than **Table 2.1**).

A3.3.3. OA Criteria. OA criteria should capture the critical elements that a system/capability must satisfy before being accepted for operational use. (see **Attachment 4**)

A3.4. Operational Acceptance Process.

A3.4.1. Describe the process/steps the system will undergo from operational test through trial period to OA (see **Attachment 2**). Include description of the roles/activities of key stakeholders throughout the process. Provide a narrative of how the system/capability will transition to operations, in essence a game plan. Focus on "who, what, why" to provide the OA Plan signature authority a clear explanation of how the system/capability will transition to operations.

A3.4.2. Testing. Address the type/level of testing that will be accomplished (e.g., DT, OT) and the test organization. Reference AFI 99-103.

A3.4.3. Trial Period. Describe length and purpose of trial period. Identify the trial period entry authority. What panels/boards must convene to approve trial period entry/exit. Who participates in trial period (operational unit). Is system connectivity and safeguards in place to ensure mission is not degraded in case of operational issues, etc.

A3.4.4. Trial Period Entry Criteria.

A3.4.5. Trial Period Exit Criteria (this may be the same as OA criteria, if so, state same as OA criteria).

A3.5. Roles and Responsibilities (address the roles and responsibilities of the following organizations as applicable).

A3.5.1. HQ AFSPC Divisions (A1, A2/3/6, A4, A5/8/9, SE).

A3.5.2. Program Management Office.

A3.5.3. Operational Test Organization (OTO).

A3.5.4. NAF.

A3.5.5. Operational Wing.

A3.5.6. Combatant Commands.

A3.5.7. Other Stakeholders as applicable.

A3.5.8. Add signature block of OA Approval Authority

Attachment 4

EXAMPLE OA CRITERIA

A4.1. While OA criteria may be tailored to the specific system/capability/modification, there are certain criteria which more than likely will apply across the board. For new systems/capabilities, a starting point for identifying OA criteria are the applicable requirement documents (e.g., CDD, CPD). OA criteria should capture the critical elements that a system/capability/modification must satisfy before being accepted for operational use. OA criteria development is a collaborative effort between the OA Plan lead organization, key stakeholders, operators, and the PMO to create and approve a set of realistic and practical operational parameters for assessing system viability.

A4.2. New System/Capability - Consider the following list when tailoring OA criteria for a new system or capability. It may not be all-inclusive, nor may all apply. Offices listed in parentheses have responsibility for or contribute to the product.

A4.2.1. Operating Concept - These concepts explain how AF capabilities translate into operational outcomes. They can be used to identify/describe interdependencies within AF forces or within the joint force IAW AFI 10-2801 (HQ AFSPC/A5XC with requirement lead).

A4.2.2. System Concept - These concepts describe how a specific system (existing or new) will be employed for a specific function/mission in one or more types of joint, multinational operations, or environments IAW AFI 10-2801 (HQ AFSPC/A5XC with operations lead).

A4.2.3. Concept of Operations (CONOPS) - NAF-approved unit-level concept of operations (unless an approved MAJCOM-level system concept is deemed sufficient by the operational testing organization) (NAF).

A4.2.4. Manpower and Organization (HQ AFSPC/A1).

A4.2.5. Information Support Plan IAW AFI 63-101/20-101, *Integrated Life Cycle Management.*

A4.2.6. Program Protection Plan IAW AFPAM 63-113, *Program Protection Planning for Life Cycle Management* (PM).

A4.2.7. Life Cycle Sustainment Plan - MDA-approved Life Cycle Sustainment Plan (PMO).

A4.2.8. Funding Levels - Sufficient O&M funds in the current fiscal year and out years.

A4.2.9. Computer Program Identification Numbers (CPIN) assigned to all software requiring or using Mission Critical Software (MCS) for National Security Systems IAW T.O. 00-5-16 (HQ AFPSC/A4).

A4.2.10. AF Equipment loaded in the Integrated Maintenance Data System (IMDS) as required IAW TO 00-20- 2 (HQ AFSPC/A4).

A4.2.11. System Training Plan (HQ AFSPC/A2/3/6T).

A4.2.12. Cybersecurity - Ensure compliance with Federal Information Security Management Act (FISMA).

A4.2.12.1. Enterprise Mission Assurance Support Services (eMASS) – load system specific cybersecurity criteria information to provide tracking and system approval status. AFSPC Authorization Official approval to operate the system in place (HQ AFSPC/A2/3/6MS).

A4.2.12.2. Registered in the Enterprise Information Technology Enterprise Data Repository (EITDR) (HQ AFSPC/A2/3/6 CIO Support Staff).

A4.2.13. Equipment/Spares – sufficient equipment/spares on hand (HQ AFSPC/A4, NAF, PMO).

A4.2.14. Training/Evaluation - NAF-approved evaluation program (NAF).

A4.2.15. Trained/Certified Operators - Sufficient number of trained and certified operators and support personnel IAW applicable Resource Readiness C-Level reporting (NAF).

A4.2.16. Procedures/TOs (HQ AFSPC/A4, NAF, PMO).

A4.2.17. Defense Readiness Reporting System (DRRS) – Ensure mission essential tasks (METs) and personnel equip and training measurement criteria are identified (HQ AFSPC/A2/3/6OR).

A4.2.18. HAF-approved deployable unit type code(s) (UTC).

A4.2.19. Safety plan in place when applicable, and all known mishap risks have been accepted by the mishap risk acceptance authority with concurrence from the system's user (MAJCOM) prior to approval for operations (HQ AFSPC/SE).

A4.2.20. Deficiency Resolution - Unresolved limitations on the system/program agreed to by HQ AFSPC, NAF, unit, and developing agency or PMO.

A4.2.21. Operational Test Results - demonstrates the system and personnel can perform the assigned mission (Operational Test Organization).

A4.2.22. Operational Risk – identify operational risks to allow decision authority to make informed decisions (respective HQ AFSPC Division; NAF; Wing).

A4.2.23. Spectrum Supportability - For spectrum dependent systems, all applicable CIO reviewed Spectrum Supportability Risk Assessments (SSRAs), Operational spectrum certifications (DD Form 1494) and disposition of identified discrepancies IAW AFI 33-580 (HQ AFSPC/A2/3/6C).

A4.2.24. Deployment Strategy.

A4.2.25. Disposal/End-of-Life Plan (PMO).

A4.3. Sustainment Modifications. Sustainment modifications to existing systems may have set criteria that apply for all upgrades to that particular system which are not as encompassing as those for a new system or capability. Refer to wing instructions if appropriate. The following list may be considered for sustainment modifications. It may not be all-inclusive, nor may all apply:

A4.3.1. Data Quality/Effects.

A4.3.2. Procedures/TOs.

A4.3.3. Training/Evaluation.

A4.3.4. Equipment/Spares.

A4.3.5. Cybersecurity.

A4.3.6. Spectrum Supportability.

A4.3.7. Operational Test/Installation & Checkout Results.

A4.3.8. Deficiency Resolution.

A4.3.9. Modification causes no degradation to the system.

Attachment 5

CYBERSPACE RESPONSIVE OPERATIONAL ACCEPTANCE

A5.1. Overview. The Cyberspace domain differs from traditional physical domains in two significant ways. In other domains, the weapon systems operate in the domains. But in Cyberspace, the inverse is true – the domain exists inside the weapon systems. This is significant because the ability to rapidly shape, create or destroy the domain as needed is a critical aspect of achieving Cyberspace superiority. Second, equipment employed in the cyber domain is often presented by a technology push. It is used globally – adversaries and allies alike have access to similar technology that the US employs. Due to the low cost of entry into Cyberspace warfare compared to air, land, sea, and space warfare, the Cyberspace domain makes it uniquely and grossly asymmetric. AFSPC must be able to react to Cyberspace development, both friendly and unfriendly, rather than apply traditional acquisition constructs to try to generate or control it.

A5.1.1. Cyberspace systems and their updates are delivered extremely fast, with far greater frequency, and updates can be very minor in scope while delivering critical capability. Operational Acceptance for weapon systems in the traditional physical domains is traditionally rigidly compliance-based, rather than flexibly risk-based. The key to realizing greater responsiveness in Cyberspace is performing an early, objective assessment of the urgency and complexity of a technology delivery. This assessment will allow AFSPC to provide OA criteria earlier, tailor the scope of OA effort, and delegate or elevate acceptance authority based on risk.

A5.1.2. An OA decision is the result of the OA process described in **paragraph 2.1**. OA is a MAJCOM authority, but delegation of selected portions of OA decision-making accelerates the decision-making and affords the 24th Air Force, 67th Cyberspace Wing, 688th Cyberspace Wing, and other units as required the opportunity to deliberately manage risk at lower, more responsive levels. This ROA construct seeks to manage and document that risk, while empowering NAF/Wing leaders with the means to remain responsive to their operations units' requirements. Ultimately, the AFSPC/CC, as the OA Approval Authority for AFSPC, has the authority to declare systems and capabilities ready for operational use.

A5.1.3. AFSPC will employ a ROA process that allows integration and employment of the constant and rapid evolution of Cyberspace technology. AFSPC will be able to assess the urgency of the need and the complexity of the change, and delegate deployment and employment decisions as close to the battlefront as possible. The ROA process will provide balance of proper lowest level leadership approval authority and scale the complexity and impact of the system delivery. It will provide capability to units as quickly as possible, as deliberately as necessary, and at the right level of acceptance authority.

A5.1.4. Assumptions.

A5.1.4.1. AFLCMC/HN retains program office authority and responsibilities over all Cyberspace Weapon Systems (CWS) and programs.

A5.1.4.2. Resources are in place and the Air Force is committed to improving cyberspace mission capabilities.

A5.1.4.3. Existing nonmaterial approval programs and Tactics, Techniques, and Procedures (TTP) programs should be considered in conjunction with OA, but remain under the governance of their applicable guidance: AFI 10-1201, *Space Operations*; AFI 11-260, *Tactics Development Program*; and AFI 11-415, *Weapons and Tactics Programs*.

A5.1.4.4. This attachment does not seek to replace existing change management guidance issued by HQ AFLCMC/HN organizations that define processes for rapidly accommodating weapon system deviation requests and weapon system maintenance activities.

A5.1.4.5. This attachment does not replace the need to complete and submit the AF 1067, *Modification Proposal* ensuring adequate sustainment and programmatic support is in place for CWS. The framework, however, inherently permits delegation decisions to be made before the AF 1067 is submitted.

A5.1.5. The Risk Assessment Team (RAT) will conduct an up-front analysis of the urgency and complexity of a given technology delivery and produce a numeric "Risk Level" determination. Input to the Risk Level assessment should be requested from the PMO, the operational unit, and HQ AFSPC staff personnel. The assessment can be prompted by a product release from a vendor, a new capability delivery, or modification to an existing capability. Affected Cyberspace Weapon System Team (WST) Leads will consolidate information to provide input to the RAT and incorporate RAT recommendations into applicable operational acceptance memos; example memos included in **Attachment 7**. Employment of the ROA process is composed of three areas: membership, work flow process, and the delegation document.

A5.1.5.1. Membership. There are two groups of RAT members: Core and Adjunct. This distinction ensures participation from primary stakeholders (core members) with the greatest level of visibility and information sharing among subject matter experts (adjunct members) whose input is required to inform ROA recommendations.

A5.1.5.1.1. Core Membership. Core members or their designated representative participate in all routine and on-demand assessment activities. The HQ AFSPC/A2/3/6W is the chair of the group and provides management and administrative functions. Specifically within HQ AFSPC, membership includes the CWS leads, Requirement Leads, subject matter experts, and program managers of the reviewed systems. Core members have voting rights during the RAT meetings and can request further information, guidance, input or other tasks from additional offices. They are also responsible for conducting or directing research to inform the risk assessment, and sharing information with other RAT members. The RAT core members are:

A5.1.5.1.1.1. HQ AFSPC/A2/3/6W.

A5.1.5.1.1.2. HQ AFSPC/A2/3/6C.

A5.1.5.1.1.3. HQ AFSPC/A2/3/6Y.

A5.1.5.1.1.4. HQ AFSPC/A5C.

A5.1.5.1.1.5. 24 AF/A5.

A5.1.5.1.1.6. 24 AF/A6.

A5.1.5.1.1.7. 67 Cyberspace Wing (CW) Technical Advisors (TA) (including subordinate Group TAs).

A5.1.5.1.1.8. 688 CW Civilian Advisor (CA) or TAs (including subordinate Group TAs).

A5.1.5.1.1.9. HQ AFSPC Staff Judge Advocate.

A5.1.5.1.1.10. AFLCMC/HNC Program Managers.

A5.1.5.1.1.11. AFLCMC/HNI Program Managers.

A5.1.5.1.1.12. AFNIC/NI Program Managers.

A5.1.5.1.2. Adjunct Membership. RAT adjunct members participate as required dependent on the issues and programs in review. The core members should notify the Chair when they believe the participation of certain adjunct members would be beneficial for particular issues to be discussed in a given RAT meeting. The Chair should ensure those adjunct members are aware their participation is requested. HQ AFSPC/A2/3/6W will establish business rules for administering other specific details related to executing RAT meetings. Example adjunct members include:

A5.1.5.1.2.1. HQ AFSPC/A2/3/6WI (Intelligence).

A5.1.5.1.2.2. HQ AFSPC/A2/3/6X (Resources).

A5.1.5.1.2.3. HQ AFSPC/A4/7.

A5.1.5.1.2.4. HQ AFSPC/A2/3/6ZT.

A5.1.5.1.2.5. 24 AF/A2.

A5.1.5.1.2.6. 24 AF/A3.

A5.1.5.1.2.7. 67 CW/JA/FM/XP.

A5.1.5.1.2.8. 67 CW Group and Squadron subject matter experts (SME) as required.

A5.1.5.2. Work Flow Process. HQ AFSPC/A2/3/6W, as the CWS integrator, manages the work flow process to scope the size and complexity of proposed technology deliveries. The role of CWS integrator is to field integrated cross-domain capabilities across cyberspace infrastructure and cyberspace weapon systems and to ensure process standardization across the cyberspace weapon systems. These duties include identifying the need, coordinating gap analysis, recommending the delegation authority level, and coordinating the ROA delegation document. Unless unusual circumstances exist proposed technology changes should not recur beyond two weekly RAT meetings; the intent of the RAT is to inform and produce OA recommendations, not to serve as a forum for broad topic discussions resulting in unactionable debate. The AFSPC WST Leads are the central mechanism for operational transition efforts, consistent with the HQ AFSPC/A2/3/6-approved Cyberspace WST charters. The RAT will also coordinate with subordinate and supporting units to identify process-to-process efficiencies to reduce

conflicts and duplication of effort, and provide smoother and faster transition between organizations' respective decision-supporting activities.

A5.1.5.3. Delegation Document. The RAT will maintain templates for the ROA delegation memo. Cyberspace WST leads will use those templates to create, staff and maintain the draft ROA delegation memorandum.

A5.2. Responsive Operational Acceptance. ROA is broken down into two characteristics: Urgency and Complexity.

A5.2.1. Urgency. The RAT will verify the urgency to field a new or updated capability regardless of the complexity and delegation of OA authority. The degree of urgency allows the OA authority to defer criteria and accept with liens, allowing them to be as responsive as necessary. Characterizing urgency is also necessary to prioritize resources and actions to meet the need. The RAT will determine the urgency of the delivery, which the Cyberspace WST lead will capture in the OA Delegation and Criteria Memo.

A5.2.2. Complexity. The RAT will also analyze the complexity of the delivery using a Risk Assessment Matrix (RAM) that contains eight criteria and sub-categories: Resources & Funding, Operational Employment Readiness, Scope, Documentation, Legal, Cybersecurity, External Coordination and Technology. The RAT will update the eight criteria and sub-categories to best adapt to individual programs and incorporate lessons learned. The criteria will be divided into six OA delegation authority thresholds (e.g., Sq/CC, Gp/CC, Wg/CC, NAF/CC, HQ AFSPC/A2/3/6 Director, and AFSPC/CC). The degree of complexity allows the RAT to scale criteria and recommend delegation to the proper OA authority. A2/3/6W is responsible to maintain, update, and distribute the RAM. **Figure A5.1** shows a representation of the RAM. The current version of the RAM is maintained on the RAT Portal at **https://eis.afspc.af.mil/unit/hq/A236/A236W/RAT/default.aspx**.

Figure A5.1. Criteria and Thresholds Matrix.

	SQ/CC	GP/CC	WG/CC	NAF/CC	A2/3/6	AFSPC/CC
Resources/ Funding						
Ops Employment Readiness						
Scope						
Documentation						
Legal						
Accreditation& Security						
External Coordination						
Technology						

A5.2.3. Scoring. RAT members will assess the risks and change significance of a given solution by scoring it on the RAM (e.g., the criteria and thresholds). By comparing the

proposed solution to each category and sub-category, the RAT will be able to identify potential complications or pitfalls in execution, identify risk areas that can be mitigated through testing, and determine the recommended acceptance authority based on the highest risk factor(s). Any conflicts or large variance in scoring must be resolved before the final recommendation. The RAT will recommend the OA that will provide balance of proper lowest level leadership approval authority and scale the complexity and impact of the system delivery. This recommendation will be responsive and comprehensive, to provide capability as quickly as possible, and as deliberately as necessary. The OA authority will be able to conduct the necessary activities to bring the delivery online as fast as possible with the correct amount of risk. This will expedite the OA work and give commanders the authority to manage the process faster and at their level of control. HQ AFSPC/A2/3/6W is responsible for keeping of ROA documents and will maintain a collaboration portal to facilitate sharing of information. They will also update documents and procedures as required.

A5.2.4. Entry Point. In most cases, the point of entry for a change is also the point of execution. For example, a vendor notifies the PMO of a patch for their software, and the PMO implements that patch across the enterprise. However, there are instances where a change can either be delegated to be more responsive, or requires elevation due to an unusual risk characteristic. For this reason, risk must be assessed at each organizational level within AFSPC and supporting PMOs. Execution of the entire RAM for high-volume, routine tasks (i.e., updating anti-virus definitions, or implementing a firewall rule, etc.) would quickly overwhelm the RAT and would limit its ability to be responsive, rather than enable it. Therefore, it is essential to capture the situational conditions and criteria that would elevate an implementation decision for routine tasks. To streamline this risk assessment at every organizational level, the RAT will oversee tailoring of the RAM to extract the appropriate sub-factors for inclusion in operational checklists, local job guides, TOs, TTPs, etc. This allows AFSPC to build in the appropriate triggers at the operational and maintenance levels to elevate execution decisions for the rare exceptions to nominal daily activities. Execution of a full RAM allows *delegation by exception*, while RAM subsets incorporated into daily procedures allows *elevation by exception*. Thus, risk can be managed at the appropriate level, regardless of entry point.

A5.3. Standard Version Numbering System. Version numbers are an industry common practice for conveying a change to a system, product, process, or other entity. However, there are no enforced industry standards for versioning systems. Applying a version number to Weapon System changes can quickly and intuitively inform both the urgency and change significance of a given delivery. Therefore, deliveries are required to employ a Standard Version Numbering System (SVNS). The RAT assesses the urgency of the need and the complexity of the solution, and the OA delegation and criteria memo shall recommend the appropriate version number level accordingly. Versioning systems used by commercial providers vary greatly across the industry, can be arbitrary, and do not always accurately portray the change significance of a release. Therefore, the SVNS employed by AFSPC is independent to a given product's version number, and the PMO(s) will maintain the correlation between vendors' product version numbers and AFSPC Cyberspace WS standard version numbers. The WS version number will be assigned upon operational acceptance, not at the time the delegation and criteria memo is signed. This accounts for that fact that projects and deliverables are not delivered in the same

order they are initiated. The SVNS shall consist of a three-tiered significance number (Major, Minor, and Patch) and an urgency suffix (Urgent, Critical, and Routine). OA deliverables require a SVNS to convey the change significance across the community.

A5.3.1. A major delivery could range from: any change to the Application Programming Interface, any change that causes forward incompatibility, a complete re-write of code, addition of capability, or forces a hardware update. A major release/delivery will be indicated by an increment of a whole number.

A5.3.2. A minor delivery could range from: addition of functionality that does not add capability, impacts compatibility, or impacts external interface, a change to the graphical user interface or other operability improvements. A minor delivery will be indicated by an increment of a tenth increment.

A5.3.3. A delivery patch could range from: fixes unwanted behavior (bugs) in the current Major/Minor version. Upgrading to a delivery will be indicated by an increment of a hundredth increment.

A5.3.4. Parent-level releases can include any number of child-level changes and could be a major, minor and/or patch impact.

A5.3.5. An urgent delivery indicates an change that a significant and immediate mission impact where a timely delivery is an exceptional consideration. The solution needs to be delivered as soon as possible and takes precedence over all other needs. All needed personnel, funding and resources will be diverted to deliver this solution. An example would be a server that has a discovered vulnerability where an adversary could acquire highly classified information. Upgrading to an urgent delivery will be indicated by a "U" suffix on its version number.

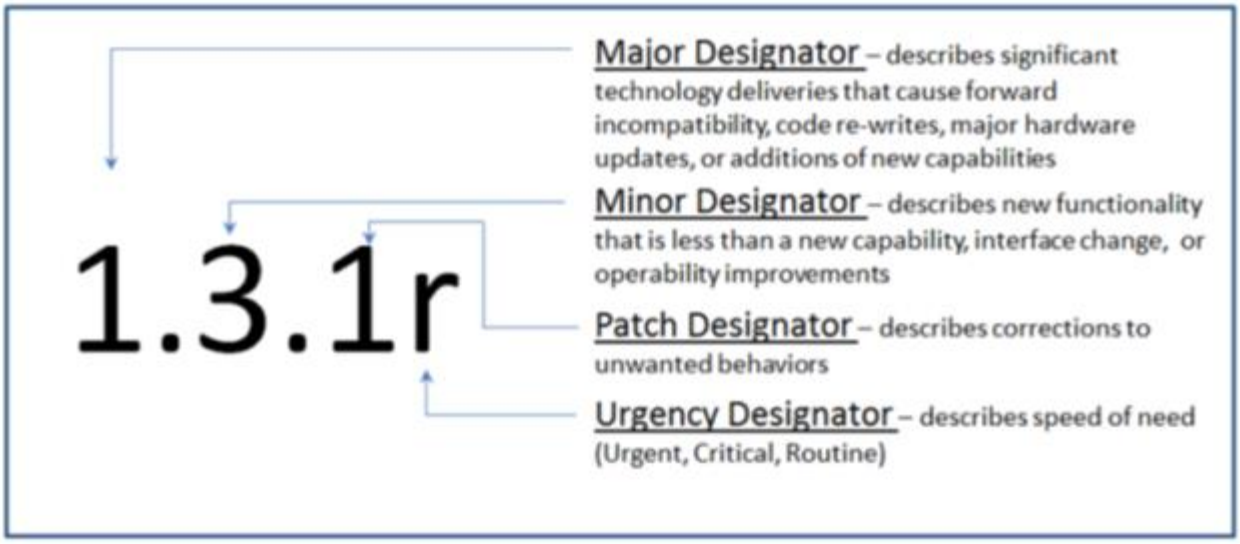
A5.3.6. A critical delivery indicates a change to meet an inevitable or unavoidable event or activity. The solution must be delivered before an event or milestone. All needed personnel, funding and resources will be prioritized to meet the schedule to deliver this solution. An example would be the Y2K event where organizations prepared for years, but they had to meet a hard deadline. Upgrading to a critical release/delivery will be indicated by a "C" suffix on its version number.

A5.3.7. A routine delivery indicates neither urgency nor criticality is a factor. It is a routine or scheduled delivery. Routine deliveries typically consist of patch-level changes to fix unwanted behavior but can also include minor-level changes or even major-level changes. They do not, however, address mission impact concerns (urgent) or critical dependency concerns (critical). An example would be a three to five year technology refresh of hardware. Upgrading to a routine release/delivery will indicated by an "R" suffix on its version number.

A5.3.8. SVNS Management and Use. The PMO manages all SVNS and their delegation for deliveries. The RAT only recommends the change significance (Major, Minor, and Patch) and urgency (Urgent, Critical, and Routine) level in the OA delegation and criteria memo. The PMO selects the delivery's SVNS number and urgency suffix. This will notify the community of the impact of the delivery. Once a solution is fully fielded and operationally accepted, the criticality suffix is dropped as it was only relevant to inform the urgency of

fielding a solution and no longer relevant once delivered. **Figure A5.2** shows an example version number.

Figure A5.2. SVNS Example.



A5.4. Delegation and Criteria Memorandum. The RAT is non-authoritative – it only recommends OA delegation authority. Once the RAT resolves the ROA criteria, the lead WST lead will draft a Delegation and Criteria Memorandum and transmit it directly to the recommended OA authority's commander's staff. This is not intended to circumvent normal administrative staffing procedures – rather to ensure decisions are delegated as quickly as possible without excessive administrative overhead.

A5.4.1. If the recommended OA authority's commander disagrees with the RAT's recommendation, he/she can return the memorandum to the RAT with comments for re-evaluation and appropriate delegation/elevation.

A5.4.2. If the recommended OA authority's commander agrees with the RAT's recommendation, he/she signs the memorandum, thus delegating OA authority to their subordinate commander, and returns it to the MAJCOM WS Integrator (HQ AFSPC/A2/3/6W) for endorsement and the appropriate WS Lead (HQ AFSPC A2/3/6C, Y or W) for program oversight.

A5.4.3. The memo identifies four major factors:

A5.4.3.1. OA delegation – per the authority of this AFSPCI, and recommended by the RAT.

A5.4.3.2. All deliverables and their associated OPR and OCR – this enumerates the required deliverables or other documents, informed by the RAT's assessment.

A5.4.3.3. Operational testing requirement if needed – this states the OA authority's intent to request formal testing and allows formation of an Integrated Test Team to initiate operational testing activities based on identified risk areas. Note that a formal Test Asset Support Request is required to formally initiate test activities. Inclusion of test in this memorandum is only to convey intent.

A5.4.3.4. Degree of complexity (major, minor, patch) and urgency (urgent, critical, routine) to inform the appropriate version number. **Figure A7.8** is an example of an OA Delegation and Criteria Memo.

A5.4.4. Implementation. Once the Delegation and Criteria Memo is issued, the OA authority is responsible for managing the delivery to operational acceptance. They can defer requirements, but not waive them. The OA Authority is able to do this so they can accept risk to employ a delivery sooner, based on urgency. They are still responsible to track full delivery. They will also provide their commander and HQ AFSPC/A2/3/6W status updates as needed, and upon final OA delivery.

A5.4.5. Use case. The following example uses the Air Force Intranet Control (AFINC) weapon system to illustrate the approach and methodology for deriving a RAT recommendation and delegation memorandum.

A5.4.5.1. An industry partner vendor informs the AFINC WS Program Manager of a projected change to approved software listed on the AFINC baseline. The AFINC PM, in coordination with the weapon system team lead (WSTL), begins completion of a RAM and leads weapon system team-level discussion on the proposed change, administratively recording estimates and recommendations on the RAM. RAT members collect appropriate source documents relevant to the proposed change under consideration, and upload these documents to the RAT portal site for other core team members to review. The WSTL coordinates with the CWS integrator to ensure the change is included in the next weekly RAT meeting. At the RAT meeting, the proposed change and identified risk areas are presented and reviewed. If additional artifacts or details are required before the RAT core members can make a recommendation, tasks are issued to appropriate members to gather additional information. Within one week, team members return to the RAT with additional details and an OA recommendation is voted upon from recommended courses of action. The CWS integrator creates a Delegation and Criteria Memo and gains the signature of the HQ AFSPC/A2/3/6W and the appropriate weapon system division chief; the signed memo is provided to the assigned, delegated approval authority (for example, the 24 AF commander). The delegated OA level organization provides follow-up status on progress or impediments to fielding.

Attachment 6

EXPERIMENTAL ACTIVITIES

A6.1. This attachment assists in the operational acceptance process of experimental activities. It does not negate the instructions directed in AFI 10-601 AFSPCSUP, AFI 60-101, AFI 61-101, AFI 63-101/20-101, and AFI 99-103.

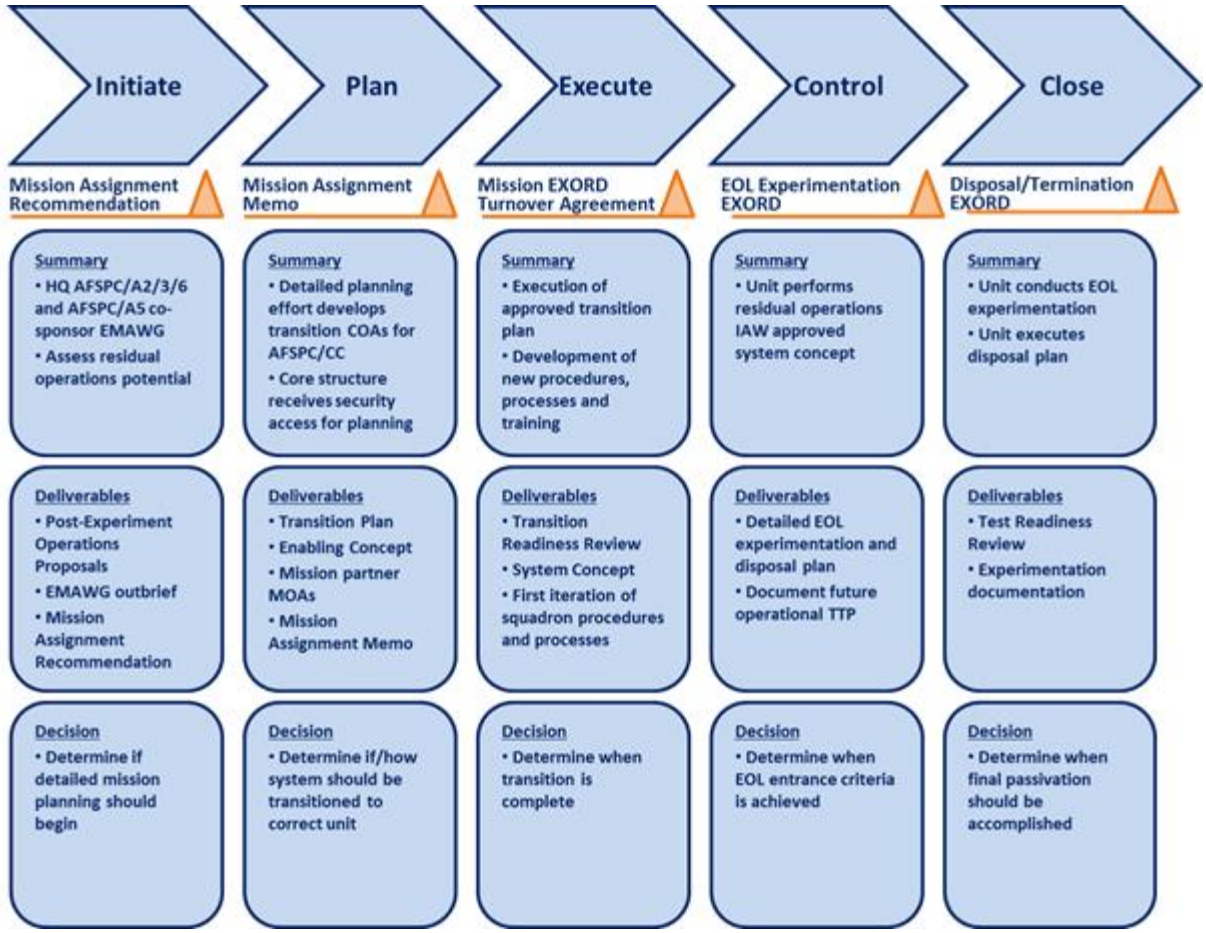
A6.2. Mission Assignment Process (MAP).

A6.2.1. The MAP provides a process for HQ AFSPC to identify and transition space-based, ground-based, and cyberspace-based S&T/demonstrations for experimental activities for service use and for training aid and TTP development. It does not establish the processes to validate funding, manpower, and logistical support requirements for systems seeking transition, but assumes those resources will be identified in the requests and proposals presented for decision. If the program for transition is a JCTD, guidance in AFI 61-101 should be followed.

A6.2.2. HQ AFSPC/A2/3/6 and HQ AFSPC/A5/8/9 co-oversee the MAP to ensure that residual operations concepts satisfy capabilities based requirements derived from user defined needs.

A6.2.3. The MAP is designed to provide a process to maximize the residual operational capabilities of space-based, ground-based, and cyberspace-based experimental activities by providing a process to identify and plan for residual operations as early as possible in the experimentation plan or react to newly identified operational requirements. This process is broken down into five phases: Initiate, Plan, Execute, Control, and Close as depicted in **Figure A6.1**.

Figure A6.1. Mission Assignment Process.



A6.3. Initiate.

A6.3.1. The HQ AFSPC Experimentation Mission Assignment Working Group (EMAWG) is an annual or ad hoc meeting called by any of the parties representing space-based, ground-based, and cyberspace -based research and development organizations, operational users, AFSPC mission partners and the PMO(s) with upcoming experimental space-based systems flown on AFSPC's enterprise ground services (EGS), ground-based, and cyberspace -based activities. This Working Group provides senior leadership the process to determine transition to operations possibilities for the utilization of space-based, ground-based, and cyberspace -based experimental activities. Interaction among EMAWG participants facilitates development of mutually-beneficial relationships between mission partners so that relevant residual operational capability can be transitioned to the correct level of support to deliver a required capability.

A6.3.2. HQ AFSPC/A2/3/6 and HQ AFSPC/A5/8/9, or their designated representatives, will co-chair the EMAWG.

A6.3.3. A Post-experiment Operations Proposal (POP) details a potential mission for a space-based, ground-based, and cyberspace-based experimentation or demonstration program following its initial experimental activities. The MAP determines whether a post-experiment proposal should be transitioned into residual operations. The Initiation phase of the MAP

should be mandated to start such that its Execution phase can commence following the completion of the experimental project.

A6.3.4. POP submissions can originate at any level; however, all formally submitted POPs will be endorsed at the wing equivalent level. POPs are submitted to the EMAWG.

A6.3.4.1. Originators submit POPs in a Background Paper and address areas/questions in **paragraph A6.3.10**.

A6.3.4.2. POPs will be capability-based and do not need to discuss funding or manpower requirements. Detailed planning will explore these considerations as the POP moves through the MAP.

A6.3.5. For the annual meeting, the EMAWG co-chairs will solicit POPs 180 days prior to the scheduled EMAWG. POPs must be submitted NLT 90 days prior to the scheduled EMAWG. For ad hoc submissions, the sponsoring party will submit the POP to the AFSPC Directorate so it can be provided to the other members at least 30 days prior to the ad hoc EMAWG.

A6.3.6. The EMAWG co-chairs will use POP inputs to establish the EMAWG agenda. HQ AFSPC/A2/3/6 and HQ AFSPC/A5/8/9 will approve the formal EMAWG agenda NLT 30 days prior to the scheduled EMAWG. HQ AFSPC/A2/3/6 and HQ AFSPC/A5/8/9 will approve ad hoc EMAWG agendas at least 5 working days prior to the EMAWG.

A6.3.7. The published EMAWG agenda will drive working group participation invitations. Where appropriate, EMAWG co-chairs will invite the participants shown in **Table A6.1** to the EMAWG.

Table A6.1. Nominal EMAWG Representation.

Nominal EMAWG Representation		
JFCC SPACE	NAFs	DARPA
PMO	Wings	SSDP
AFRL	NRO	AF TENCAP
NASIC	MIT/LL	OGAs
NRL	USAFWC	HQ AFSPC
ORS Program Office	AFRCO	SMDC
NASA	DoD Space Test Programs	AFNIC

A6.3.8. Co-chairs will ensure appropriate security clearances for all key stakeholders attending the EMAWG.

A6.3.9. EMAWG attendance will be unit-funded.

A6.3.10. At a minimum, the EMAWG must answer the following questions for each POP:

A6.3.10.1. What is the program or system identified for potential post experiment activities?

A6.3.10.2. What is the post experiment mission?

A6.3.10.3. Does the proposal satisfy an operational requirement or capability?

A6.3.10.4. Does the proposal provide an opportunity to develop new TTPs, define future requirements, or reduce future program or operational risk?

A6.3.10.5. Is the proposal technically and operationally feasible?

A6.3.10.6. Which unit is best equipped to execute the proposal?

A6.3.10.7. Should HQ AFSPC/A2/3/6 and HQ AFSPC/A5/8/9 direct detailed planning to further develop the proposal?

A6.3.10.8. What are the employment considerations?

A6.3.10.9. What is the residual operational utility?

A6.3.10.10. What are (is) the operational unit advanced training applicability and potential risk reductions for future programs (if applicable)?

A6.3.10.11. What is the timeliness of transition and expected remaining useful life of the system?

A6.3.11. The EMAWG will examine POPs to determine appropriateness for assignment to a unit based on the following criteria: residual capability, programs of record, unit expertise, core competencies, and capacity. Unit efforts will focus on space-based, ground-based, and cyberspace-based experimental systems capable of providing residual operational utility through residual operations. This focus leverages the command and control expertise inherent within the Operations Groups, while allowing other experimentation units (e.g. SMC/AD, AFRL/RV) to focus on research and development.

A6.3.12. HQ AFSPC/A2/3/6 and HQ AFSPC/A5/8/9, or their designated representatives, will receive the final EMAWG out brief. For each considered POP, HQ AFSPC/A2/3/6 and HQ AFSPC/A5/8/9 will jointly decide whether to initiate formal detailed planning.

A6.3.13. The POP detailed planning decision will identify an OPR to lead the detailed planning and transition process.

A6.4. Plan.

A6.4.1. The decision to pursue POP detailed planning transitions the MAP into the Plan phase. The Plan phase produces a mission assignment decision package for AFSPC/CC, which details comprehensive Courses of Action for post-experiment operations transition.

A6.4.2. Mission assignment decision packages provide all of the planning required to make a comprehensive recommendation on whether an experimental system should be transitioned to post-experiment operations and how that transition should occur. A draft decision package is due to HQ AFSPC/A2/3/6 NLT 90 days following the decision to pursue POP detailed planning. A final package is due to AFSPC/CC NLT 150 days following the decision to pursue POP detailed planning. The mission assignment decision package will include the following:

A6.4.2.1. HQ AFSPC/A2/3/6, in conjunction with HQ AFSPC/A5/8/9, SMC and any relevant mission partners, will include an assessment on the military utility of the

proposed post-experiment mission. Military utility includes residual operational capabilities, TTP development opportunities and potential risk and fiscal reductions for future programs.

A6.4.2.1.1. Draft TTP developed to support the transition should be drafted IAW AFSPCI 10-260. Waiver requests against the AFSPCI should be included in the draft.

A6.4.2.2. The post-experiment agencies (i.e. PMO, lab, or mission partner) will include a funding assessment that incorporates all elements of post-experiment operations. The post-experiment agencies will also include an updated End of Life (EOL) plan, Environmental Impact Analysis, and a Data Analysis and Management Plan.

A6.4.2.3. Define the government and contract support requirement to support transition. AFSPC needs to understand manpower resource requirements.

A6.4.2.4. The unit, through HQ AFSPC/A5XC, will include a mission specific operating concept. The operating concept will be derived from experiment deliverables detailed in the mission assignment decision package. This document will detail how the unit will operate the mission and all necessary and enabling resources and processes the unit requires to execute the potential mission. These include requested manpower and facility requirements. It will also include any mission specific waivers required for the unit to successfully accept the mission.

A6.4.2.5. The mission assignment decision package will identify the transition OPR directorate inside of HQ AFSPC.

A6.4.2.5.1. The transition OPR will provide a transition plan that details all actions required before the transition is complete. The transition plan will identify transition decision authority, transition criteria, and any organize train and equip requirements.

A6.4.2.5.2. The transition OPR will include a draft Mission Assignment Memorandum for AFSPC/CC signature.

A6.4.3. AFSPC/CC is the final authority on whether AFSPC should transition an experimental activity to residual operations. A Mission Assignment Memorandum documents this decision. An affirmative decision will also include an OPR to oversee the execution of the approved transition plan.

A6.4.4. The unit core structure will receive the appropriate security clearances required to participate in detailed planning.

A6.5. Execute.

A6.5.1. The formal assignment of a mission for post-experiment operations initiates the execute phase of the MAP.

A6.5.2. During this phase, the transition OPR oversees the execution of the approved transition plan.

A6.5.3. Once a mission is assigned for residual operations, HQ AFSPC/A5XC in conjunction with the unit, will oversee the development of a mission-specific system concept.

A6.5.4. For units designated to receive a new mission, the signed Mission Assignment Memorandum will initiate unit planning to stand up operations.

A6.5.4.1. The unit leadership will oversee the development of a cadre of system SMEs through Type I training.

A6.5.4.2. The unit leadership will oversee the development of training, evaluation, and weapons and tactics programs that meet the requirements of the approved transition plan.

A6.5.4.3. The unit leadership will oversee all facility modifications and system installations required to perform operations of the new mission.

A6.5.5. The Execute phase culminates with a Transition Readiness Review, the system certified for post-experiment operations, the approved and complete Transition Plan, and a signed Turn-over Agreement.

A6.5.6. The AFSPC/CC will chair the Transition Readiness Review. This may be delegated to the Directorate or Division that is assigned as program lead.

A6.5.7. An execution order (EXORD) from the appropriate command and control authority will initiate residual operations.

A6.6. Control.

A6.6.1. During the Control phase, the unit operates the assigned mission system IAW the approved mission specific system concept.

A6.6.2. The control phase ends when the EOL criteria are met and the command and control authority issues an EOL EXORD.

A6.6.3. Mission partner-sponsored experiments during the control phase will be submitted for satellite control authority (SCA) approval through an Operational Asset Usage Request.

A6.6.4. During the Control phase, the unit is responsible for assembling and staffing an EOL experimentation plan. SCA will approve EOL experimentation plans at a Test Readiness Review prior to implementation.

A6.7. Close.

A6.7.1. The Close phase encompasses EOL test and disposal actions.

A6.7.2. The unit will execute the EOL experimentation plan after receiving authority to proceed at the Test Readiness Review.

A6.7.3. A Disposal/Termination EXORD will initiate disposal and passivation actions IAW the approved EOL plan.

A6.7.4. In the Close phase, the unit and mission partners will document and disseminate all applicable lessons learned and satisfy all experiment deliverables detailed at the transition readiness review.

A6.8. Lessons Learned Management.

A6.8.1. An effective experimentation capability entails a deliberate lessons learned management process. This process must capture and disseminate insight, best practices, new tactics, and future program requirements, and ensure they are disseminated to the appropriate organizations for implementation.

A6.8.2. TTP experimentation produces new tactics or defines/refines future system requirements. Because of this broad applicability, the space-based, ground-based, and cyberspace-based experimentation lessons learned management process will be flexible enough to satisfy all potential customers.

A6.8.2.1. The unit, in conjunction with any mission partners, will deliver an After Action Report (AAR) to HQ AFSPC/A2/3/6 following all experiment campaigns. Based on the findings, the HQ AFSPC/A2/3/6 designated representative will assign OPRs for any derived action items and track their status through completion.

A6.8.2.2. The unit will maintain a database of all lessons learned identified during assigned experiments.

A6.8.2.3. All lessons learned related to current operations, force employment, threat identification and mitigation, or weapon system integration will be published in a Flash Bulletin IAW AFSPCI 10-260 following the completion of the experiment campaign. The unit, in conjunction with experiment mission partners, will author these bulletins. All lessons learned will be reviewed for potential incorporation into future capabilities-based requirements documents IAW AFI10-601 AFSPCSUP and force development concept documents IAW AFI10-2801 AFSPCSUP.

A6.8.2.4. All experiments will include a data management plan. Data sharing will allow mission partners to conduct detailed analysis of experiment results and incorporate experiment outcomes into their internal lessons learned management process.

A6.8.2.5. The unit will periodically update internal experiment procedures and ensure experiment processes and standards are consistent across the wings. Upon request, the unit will share these procedures and best-practices with any mission partners conducting space-based, ground-based, and cyberspace-based experimentation.

Attachment 7

SAMPLE MEMORANDUMS

Figure A7.1. Trial Period Entry Approval Memorandum.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND

19 Mar 15

MEMORANDUM FOR DISTRIBUTION

FROM: HQ AFSPC/A2/3/6S
150 Vandenberg St Ste 1105
Peterson AFB CO 80914-4250

SUBJECT: Trial Period Entry Approval for Perimeter Acquisition Radar Characterization System (PARCS) VV/15-1

1. PARCS VV/15-1 rehosts the Message Processing Subsystem (MPS) software on the Mission Processor Unit (MPU) to address replication issues with the legacy Data Transmission Controller (DTC).

2. 10th Space Warning Squadron (10 SWS) successfully completed Installation & Checkout Evaluation (ICE) of VV/15-1 and has met trial period entry criteria with no Category I deficiencies.

3. 10 SWS is approved to enter trial period for VV/15-1 at 1919000ZMAR15.

4. If changed configuration induces detrimental mission impact, the site may mitigate this by implementing fallback procedures to the legacy version VV/14-1. Site commander is responsible to determine if changed configuration causes detrimental mission impact and direct fallback procedures if required. Fall back time is 12 hours. In the event of fallback, the site will notify the AFSPC OAP which will provide official notification of trial period exit.

5. Prior to trial period exit, 21 OSS will facilitate a Trial Period Review Panel (TPRP) to review trial period results for a trial period exit and Operational Acceptance decision. Metric observation and Space Object Identification (SOI) will be evaluated during trial period and results available to support trial period exit.

6. POC on this matter is (name, e-mail address, and telephone number).

MIGUEL J. COLÓN, Colonel, USAF
Chief, Space Operations Division

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Figure A7.2. Trial Period Entry Approval Memorandum.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND

12 May 15

MEMORANDUM FOR DISTRIBUTION

FROM: HQ AFSPC/A2/3/6Y
150 Vandenberg St Ste 1105
Peterson AFB CO 80914-4250

SUBJECT: Trial Period Entry Approval for Astrodynamic Support Workstation (ASW) ER 14-3

1. The JSpOC ASW Special Perturbation (SP) Tasker Release (JASPR), Capability Drop 3 (ER 14-3) provides seven modifications to ASW which enhances the JSpOC Orbital Safety Analyst's ability to perform SP catalog maintenance and conjunction assessment and improves accuracy, efficiency and operator ease of use. Additionally, implementation of the USSTRATCOM directed extrapolated General Perturbations (eGP) Common Epoch is included in this release.

2. ASW ER 14-3 completed regression CT/DT testing, Verification Installation & Checkout (VICO), and is currently in unit Ops Checkout (SOAK). Two deficiencies occurred; the root causes for each were identified and software patches were implemented, tested, and verified. ASW ER 14-1 met NumVal requirements and all trial period entry criteria have been met.

3. 614 AOC is approved to enter operational trial period for ASW version ER 14-3 at 122000ZMAY15. Trial period is projected to last approximately 15 days.

4. If changed configuration induces detrimental mission impact, site will mitigate this by implementing fall back procedures, where version ER 14-3 is de-installed and version ER 14-2 is re-installed. Fallback time is 4 to 6 hours. 614 AOC/CC has responsibility to direct fall back procedures and will notify the AFSPC OAP of fallback.

5. A Trial Period Review Panel to review results of trial period will convene prior to trial period exit.

6. POC on this matter is (name, e-mail address, and telephone number).

JOHN J. GAETA, GG-15, DAF
Chief, Battle Management Division

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Figure A7.3. Trial Period Entry/Conditional Exit Approval Memorandum.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND

12 Nov 15

MEMORANDUM FOR DISTRIBUTION

FROM: HQ AFSPC/A2/3/6S
150 Vandenberg St Ste 1105
Peterson AFB CO 80914-4250

SUBJECT: Trial Period Entry/Conditional Exit Approval for GEO Merged Baseline Release (MBR) 14-1A on String 2

1. MBR 14-1A is a patch to MBR 14-1 to deliver Ground Control software updates in support of the Ranging Commanding and Telemetry Chassis - Replacement (RCTC-R) hardware at Relay Ground Station - Europe (RGS-E).

2. The 460th Operations Group, Detachment 1 (460 OG/Det 1) successfully completed Installation, Checkout and Evaluation (ICE) for MBR 14-1A on String 2: ranging and ground control configuration verified, successful live test commanding to vehicle via L6 with L4 and L5 downlink, 72-hour soak verified no system degradation and stare and compare with antenna 1 L1T and new antenna 2 RCTC-R link 4 mission downlinks exhibited consistent reliability with the operational string baseline. MBR 14-1A meets operational expectations on Interim Test Center (ITC) String 2.

3. 460 OG/Det 1 is approved to enter trial period for MBR 14-1A on String 2 at 121600ZNOV15 and has conditional approval to exit trial period NET 72 hours after trial period entry given no ground software related OPSCAP issues during trial period and no Category I Problem Reports are encountered. If trial period exit conditions are not met, 460 OG/OGX will convene a Trial Period Review Panel to review results prior to a trial period exit decision being rendered.

4. 460 OG/Det 1 will inform AFSPC OAP via email of MBR 14-1A trial period entry and exit (DTG).

5. If MBR 14-1A induces detrimental mission impact the site may mitigate this by implementing the following procedures: fall back to MBR 14-1 on String 1. Fall back time is classified, for questions contact: IST 808762013.

6. POC on this matter is (name, e-mail address, and telephone number).

MIGUEL J. COLÓN, Colonel, USAF
Chief, Space Operations Division

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Figure A7.4. Trial Period Exit Approval/Operational Acceptance Memorandum.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND

1 Jul 15

MEMORANDUM FOR DISTRIBUTION

FROM: HQ AFSPC/A2/3/6
150 Vandenberg St Ste 1105
Peterson AFB CO 80914-4250

SUBJECT: Trial Period Exit/Operational Acceptance of Eglin FF/11-1 Control and Signal Processor Upgrade (CSPU)

1. The Control and Signal Processor Upgrade (CSPU) replaces the obsolete Radar Interface & Control Equipment (RICE), Radar Interface & Control Equipment - Communications Interface (RICE- CIF), and the Signal Processor Segment with the following subsystems: Digital Signal Processor Subsystem (DSPS); Radar Interface and Maintenance Subsystem (RIMS); Ten Beam Receiver Subsystem (TBRS); and the Timing and Waveform Generator Subsystem (TWGS).

2. FF/11-1 successfully met trial period exit criteria with no mission degradation and no Category I deficiencies per TO 00-35D-54, *USAF Deficiency Reporting, Investigation, and Resolution*. 20th Space Control Squadron is approved to exit trial period for FF/11-1 at 012200ZJUL15.

3. Per AFSPCI 10-205, *Operational Transition Process*, Operational Acceptance is granted for FF/11-1. Request USSTRATCOM/J65 complete certification for FF/11-1.

4. POC on this matter is (name, e-mail address, and telephone number).

STEPHEN T. DENKER
Major General, USAF
Director of Integrated Air, Space
Cyberspace and ISR Operations

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Figure A7.5. Trial Period Exit Approval/Operational Acceptance for ITW/AA Contributor.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND

7 Jan 15

MEMORANDUM FOR DISTRIBUTION

FROM: HQ AFSPC/A2/3/6 A3S
150 Vandenberg St Ste 1105
Peterson AFB CO 80914-4250

SUBJECT: Trial Period Exit/Operational Acceptance for UEWR Release (UR) 11-1 at BMEWS Site III (RAF Fylingdales)

1. UEWR Release 11-1 is an Operational and Information Assurance (IA) hardware and software upgrade for the Upgraded Early Warning Radars (UEWR).

2. UR 11-1 at BMEWS Site III completed a Force Development Evaluation (FDE) and has successfully met all trial period exit criteria with no Category I deficiencies and no mission degradation. Royal Air Force (RAF) Fylingdales is approved to exit UR 11-1 trial period upon receipt of this memorandum.

3. Per SI 534-22 and NI 10-3, Operational Acceptance is granted for version UR 11-1 at BMEWS Site III (RAF Fylingdales).

4. Request USSTRATCOM/J65 complete system certification.

5. POC on this matter is (name, e-mail address, and telephone number).

MIGUEL J. COLÓN, Colonel, USAF
Chief, Space Operations Division

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Figure A7.6. Operational Acceptance Memorandum Post Trial Period Exit (used with Conditional Exit Approval).

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND

6 Aug 15

MEMORANDUM FOR DISTRIBUTION

FROM: HQ AFSPC/A2/3/6S
150 Vandenberg St Ste 1105
Peterson AFB CO 80914-4250

SUBJECT: Operational Acceptance of SBIRS GEO Pointing Control Assembly (PCA) 12.7.0 Patch 1

1. PCA 12.7.0 Patch 1 provides GEO 1 and GEO 2 on-board protection of sensor hardware against several failure scenarios by improving Flight Software response time.

2. 460 OG Detachment 1 (Det 1) completed all PCA 12.7.0 Patch 1 activities for both GEO vehicles and successfully met trial period exit criteria with no deficiencies and no degradation to the system. PCA 12.7.0 Patch 1 exited trial period at 041817ZAUG15.

3. Per NI 10-3 and SI 534-22, Operational Acceptance is granted for PCA 12.7.0 Patch 1.

4. Request USSTRATCOM/J65 complete certification of PCA 12.7.0 Patch 1.

5. POC on this matter is (name, e-mail address, and telephone number).

MIGUEL J. COLÓN, Colonel, USAF
Chief, Space Operations Division

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Figure A7.7. IOC Declaration and CCDR Presentation Memorandum.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND

DATE

MEMORANDUM FOR CDRUSSTRATCOM

FROM: AFSPC/CC
150 Vandenberg St Ste 1105
Peterson AFB CO 80914-4250

SUBJECT: [System] Initial Operational Capability (IOC) Declaration and Combatant Commander (CCDR) Operational Acceptance [or Presentation]

1. Effective [date], [System] successfully met the IOC criteria stated in the Operational Requirements Document [or Capabilities Development Document] and AFSPCI 10-205 and has achieved IOC. I am presenting [system] to US Strategic Command for CCDR Operational Acceptance.

2. [System description] [System] is an ACAT I program that provides secure, survivable and enduring satellite communication services to strategic and tactical warfighters and other users worldwide. Operational testing resulted in [provide high level results of OT which supports IOC declaration]. All logistics, resource and sustainment processes are in place and the system is ready for operational use.

3. [Liens – address any liens that have been imposed as part of IOC and what office will track to completion]:

a. [lien description, explanation of mission risk, estimated resolution timeframe]

b. [continue as necessary]

4. Final para often a congratulatory statement or projection of what system will do for warfighters, include POC information (e.g., Flight X should well serve the joint and national missile warning needs for many years to come. If you have any questions, contact my Chief, Space Operations Division, (name, e-mail address, and telephone number).

NAME
General, USAF
Commander

cc:

GUARDIANS OF THE HIGH FRONTIER

Figure A7.8. ROA Delegation and Criteria Memorandum.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPACE COMMAND

21 Jan 16

MEMORANDUM FOR SEE DISTRIBUTION

FROM: HQ AFSPC/A2/3/6W
150 Vandenberg Street, Suite 1105
Peterson AFB CO 80914-4220

SUBJECT: Operational Acceptance (OA) for temporary use of *Autopsy* on Cyberspace Vulnerability Assessment/Hunter (CVA/H)

1. This memorandum establishes both OA criteria and authority for the use of *Autopsy* on CVA/H for temporary operational use. These criteria shape the strategy intended to expedite fielding while identifying and mitigating operational, technical, and safety risks. It aligns with processes in AFI *63-101/20-101, Integrated Life Cycle Management;* AFPAM 63-128, *Integrated Life Cycle Management*; AFI 63-131, *Modification Management*; AFI 99-103, *Capabilities-Based Test and Evaluation,* AFSPCI 10-205, *Operational Transition Process* and AFSPCI 99-103, *Capabilities-Based Test and Evaluation of Space and Cyberspace Systems* and the *HQ AFSPCGM2015-01, Guidance Memorandum for Cyberspace Responsive Operational Acceptance (ROA),* dated 19 Nov 2015.

2. In accordance with AFSPCI 10-205, HQ AFSPC/A2/3/6 is delegated OA Approval Authority for weapon systems with hardware or software baseline changes and is hereby further delegated to HQ AFSPC/A2/3/6W by recommendation of the Risk Assessment Team (RAT) IAW AFSPCGM2015-01 (the ROA GM). The RAT convened on 14 Jan 16 and recommended temporary Operational Acceptance of *Autopsy* for use on CVA/H, Risk Assessment Matrix at attachment 2.

3. Below are the eight criteria and their status for Temporary Operational Acceptance of *Autopsy*:

a) Resources/Funding: Low Risk; temporary modification with no long term funding required.

b) Ops Employment Readiness: Low Risk; *Autopsy* will be utilized on a stand-alone MIP with no connection to the network.

c) Scope: Low Risk; temporary modification required by the users for mission accomplishment.

d) Documentation: Low Risk; unit has experience using *Autopsy* and has necessary job aids.

e) Legal: Low Risk; no legal concerns, as licenses will be acquired within existing budget as required.

f) Accreditation & Security: Low Risk. ATO/IATT not required due to temporary modification and use only on stand-alone MIP.

g) External Coordination: Low Risk. None.

h) Technology: Low Risk. Software has been used before with no technical issues.

4. Given the recommendation of the RAT, the input of the operational commander, and the status of the eight criteria, I operationally accept *Autopsy* for temporary use on CVA/H by the 834 COS. *Autopsy* will be removed from the weapon system at the completion of the mission and the MIP will be reimaged to the operational baseline. The HQ AFSPC/A2/3/6WD POCs are Lt Col Greg McCulley, DSN 692-6002 or Mr. Phil McDaniel, DSN 692-6788.

KELLY A. KIRTS, Colonel, USAF
Chief, Offense, Defense and ISR
Effects Division

Attachments:
1. Distribution List
2. Risk Assessment Matrix

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